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Approximately 400 superintendents, specialists and consultants, principals, a
teachers in 63 San Francisco Bay Area school districts were surveyed
questionnaires to identify (1) critical decision processes in the field of education a
(2) the information sources and kinds of information which are used to supp
decision making and planning. The main results of the study include: (1) The mo
frequently used information sources are colleagues, principals, contacts
professional meetings, superintendents, and curriculum specialists; (2) modes
communication tend to be informal; (3) in 24 areas of educational planni
superintendents and principals average the highest levels of involvement in decisi
making; (4) the five decisions regarded as most important are decisions to hire n
teachers, terminate teaching personnel, recommend and install new curricul
innovations, and alter student teacher ratios; (5) lack of time to study proble
excessive focus on financial aspects, need to satisfy many groups, lack of resea
support, and failure to define goals are the major stumbling blocks to effecti
decision making; and (6) according to superintendents, principals and then teache
are the primary sources of innovation. A related document is EA 002 090. (HW)

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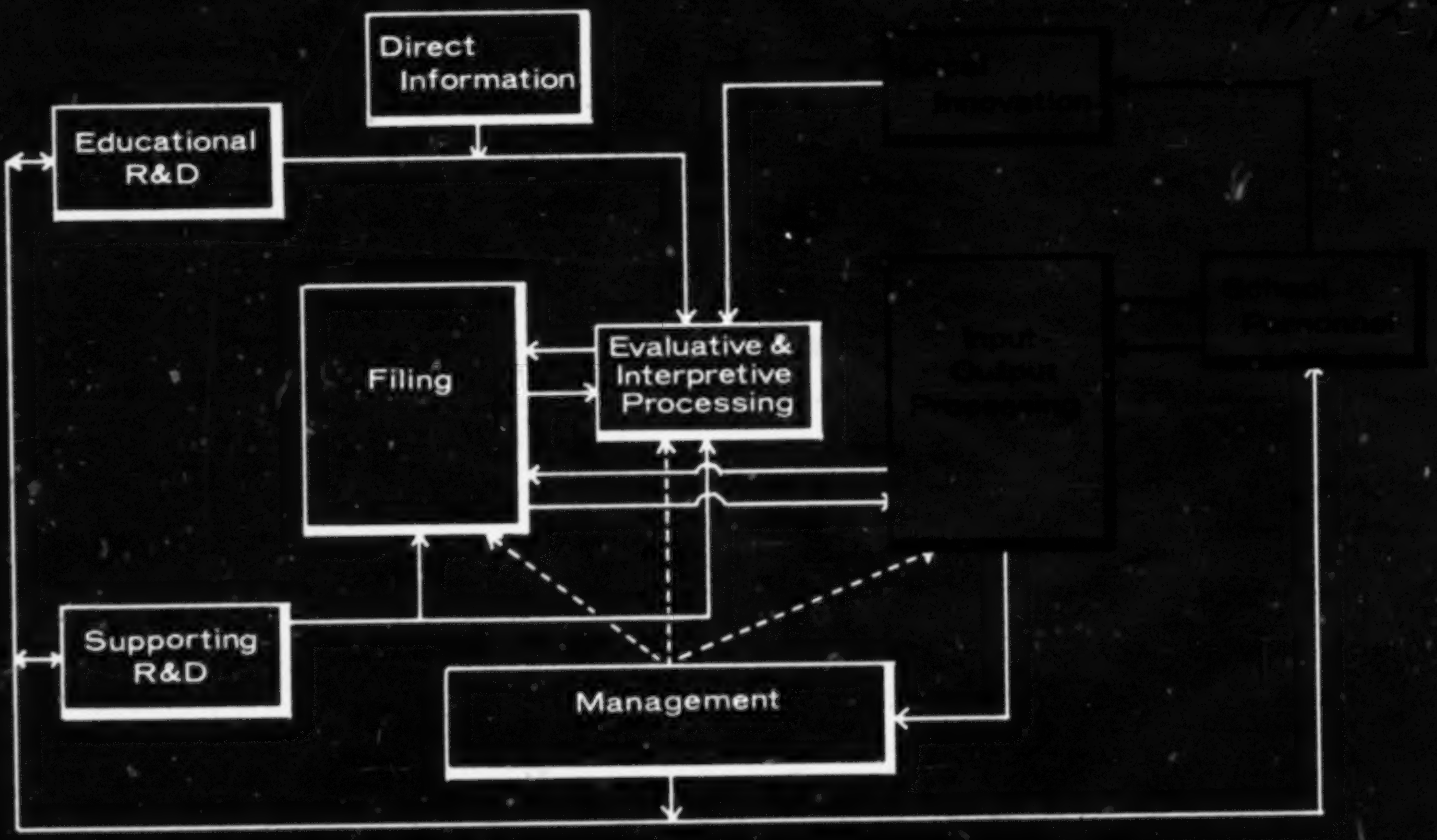
Direct Information
Educational R&D
Innovation
Filing
Evaluative & Interpretive Processing
Input-Output Processing
Supporting R&D
Management

A FIELD SURVEY

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DECISION PROCESSES AND INFORMATION NEEDS IN EDUCATION: A FIELD SURVEY

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Report to the Far West Laboratory for
Educational Research and Development

This report represents Part II of the results of a study which was performed by Stanford Research Institute for the Far West Laboratory for Educational Research and Development, Berkeley, California.

The assistance of Dr. Paul D. Hood and Dr. David H. Carlisle of the Far West Laboratory in the conduct of this study is gratefully acknowledged.

FORWARD

The goal of the Communication Program is to increase the ability of school personnel to make effective decisions regarding the use of the products of educational research and development. The immediate objectives of the program are (1) to develop and evaluate methods for presenting general R & D information based upon investigations of the needs and interests of school personnel; (2) to develop prototype systems for providing comprehensive and well-evaluated specific information; and (3) to investigate and develop organizational arrangements and training methods that will improve the R & D information utilization and decision-making process in the schools.

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In a report entitled Educational R & D Information System Requirements existing conditions, a model system, and immediate requirements were outlined. The schema for that system appears on the cover of this report. Previous to the publication of the system requirements report a brief literature search, a few field interviews, and a sampling survey had been completed. These are reported in Communication and Utilization Study for Educational Research and Development and in Communication Program Survey, Spring 1967. With a better definition of requirements there was a need to conduct a more comprehensive search of the literature and to investigate, through survey and questionnaire, the details of decision processes and information needs as they pertain to the use of R & D information in elementary and secondary school systems. The literature search and questionnaire survey are complementary studies, conducted under subcontract by the Stanford Research Institute, designed to provide the Communication Program with an independent appraisal of what the literature has to offer and what the user in the schools has to say about educational R & D information needs and utilization.

This report contains the results of the questionnaire study. A companion report, Use of Resource Material and Decision Processes Associated with Educational Innovation: a Literature Survey describes the literature survey which was accomplished in preparation for the design of the questionnaire study.

Other related reports by the Communication Program include: Organizational Arrangements and Personnel Training Programs for Effective Use of R & D Information in Decision Making Processes of School Systems, What About the School Research Office? and The Research and Instruction Unit as an Organizational Arrangement to Increase the Utilization of Research Related Information.

PAUL D. HOOD
Director
Communication Program

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I INTRODUCTION

Background of the Present Study

The General Problem of Information Utilization in Education

One of the most critical problems which confronts the field of education today is that of translating research results into practice. Information with respect to research results must be known and it must be made available when decisions are imminent with regard to curriculum changes or other changes which are being contemplated. Decision-makers also are in need of other educational information which may not stem from research but which may fall more properly under logistical or personnel headings. Such information may be packaged in many ways which are different from self-contained research reports but it would be decidedly welcomed if those who needed the information were aware of it and could avail themselves of it at the time that decisions are being made. A genuine problem exists in education with respect to bringing decision-makers together with the conceivable array of information, R&D and otherwise, so that eventual plans will have been optimized by consideration of most of the available material related to current problems of concern. Educational decisions are not made in a vacuum since many channels, formal and informal, exist through which information of all kinds and the experience of others is communicated. Neither are there large bodies of elegant and highly applicable findings lying around which need only an information system through which they may be communicated. There will always be a need for educational practitioners to supply their own training and experience to the solution of problems. It may be hoped, however, that less stress be placed upon the human component in the system if it can share in the experience of the aggregate so that the educational decision process can be facilitated in a time when educational developments are moving swiftly and research is being accelerated.

In this age of large-scale systems, it is difficult to resist the feeling that one need only design a new system that will feed information to decision-makers in whatever form or content they deem necessary for the solution of their problems. Rationally speaking, one may identify the array of decision-makers in education and the decisions which confront them, and then store information to which they will have access in relatively uncomplicated ways. It cannot be denied that such a system is desirable and there is reason to believe that ultimately education will yield to viable information systems just as such systems have arisen to deal effectively with other complex fields in which there have been information handling problems. In education there are new systems, and others on the drawing boards, however limited at present, which show promise for relief of the critical problems of information gathering, storage, and dissemination.

Even before the notion of systems became popular, educators had developed their own "quasi" or informal systems for gathering and disseminating information for planning purposes or for providing guidance to others. These systems are not the most efficient ones that could have been designed but they have provided channels of information, a flow of communication, and a knowledge of sources where certain kinds of information could be obtained, whether for decision-making or other purposes. It is very unlikely that new systems can break so radically with the past as to skip or bypass the perennial problems which have been attendant upon information handling and decision-making in education. Not only must new systems take into consideration those problems which have plagued the field, but they will also require formalized information, for their design phase, on such critical factors as categories of decision-makers, types of educational information products, sources of information, the frequency with which information is required, and the forms in which it is desired. It is through the systems analysis of such important components that the designer may create an educational information system which will meet the needs of educational practitioners having a diversity of interests. The survey which is the object of the current report has had the purpose of developing findings which will provide insights to some of the requirements which should be considered in designing new systems with respect to the sources of information and the information needs of those responsible for decision-making.

Relationship of This Study to the Far West Laboratory Communication Program

The Far West Laboratory for Educational Research and Development has established a communication program which is concerned with improving the procedures of dissemination, and insuring the effective use of information concerning educational innovations, research, and development.

One major objective of this program is to study and develop means for the creation of a system for the production, storage,retrieval, and display of educational information. This study is in support of this objective.

Purpose of the Present Study

General

The general purpose of the survey was to provide findings on some of the processes of information utilization which exist today in education and also to provide findings on educational decision-making. The results may be useful for the planning of new information systems and for improving current procedures, formal or otherwise, which are followed by practitioners in the field.

Specific

The following specific purposes underlie this study:

1. The identification of, and a determination of the frequency with which, current information sources and forms of information are utilized by planners, decision-makers and others in the educational field.
2. Determination of the levels of responsibility or role differentiation, with respect to participation in the decision process, among personnel who perform different educational functions.
3. Determination of the types of information which are considered to be critical components of educational planning in several representative areas. It was felt that information might have some hierarchical properties of criticality or pertinence when referenced to specific educational planning areas.
4. Determination of the difficulty which educational practitioners have experienced in obtaining data or information which is necessary in their planning functions, and more specifically

whether information considered highly important in the decision process is also difficult to obtain.

5. Determination of the relative criticality of decisions in the general context of education. If, among a diversity of educational decisions, some are found to be of greater impact or relevance to the field, such findings can then be pursued later to determine whether such critical decisions are supported by available and reliable information.

6. Determination of the existence of general problems which plague the educational decision process. These might be concerned with the process, per se, or ancillary factors. Such problems may be treated later through ameliorative steps which include improvement of information flow to those responsible for decisions.

7. Determination of the history of breakdown in the planning process due to the lack of, or inadequacy of information. Patterns may be discovered in "critical incidents" where such breakdown occurred.

8. Determination of the channels of innovation and change which characterize school districts, i.e., identification of the primary agents of innovation inside school districts and the external sources from which they draw their ideas. If paths and primary agents leading to the adoption of change in the classroom can be identified, such channels may be incorporated into information systems designed in the future.

9. Determination of role differentiation in information use. Do principals, teachers, superintendents, and staff members have

different information needs, use different channels for obtaining information, and perceive that they have different problems in decision-making if they participate in the decision process at all? Further differentiation was sought as regards an educational experience, school district size and pupil expenditures. If significant differentiation as a function of such variables emerges with respect to decision processes and information utilization, designers of new educational information systems may consider it necessary to accommodate such differences in their designs.

II SUMMARY OF THE STUDY AND MAIN FINDINGS

A study was made of the processes of educational planning and decision-making, with special emphasis upon associated information needs. The sample for this study was chosen from 63 school districts in the San Francisco Bay Area. Elementary, high school and unified school districts were represented. Educational personnel drawn from these districts represented four general position categories, namely, superintendent and assistant superintendents; educational specialists and consultants at the district staff level; principals and vice-principals; and teachers. The primary characteristics which were obtained on each individual included his position category, length of experience in education, the ADA and the Cost per ADA of his home district. The basis of this study was a questionnaire survey and the results represent the analyses of responses from approximately 400 educational personnel.

The survey questionnaires are described more completely in later sections of this report. In general, the survey concerned itself with determining new findings on sources of educational decision-making and planning, problems which arise in decision-making, information requirements, and the criticality of information for planning purposes. More specific objectives underlying this study may be found in Section I, Introduction, under Purpose of the Present Study.

The following are main findings of the study.

1. The prediction of questionnaire responses from a combination of measures representing position categories, experience, ADA, and

Cost per ADA of each respondent's home school district was found to be so limited that the analysis of the results was based mainly upon data representing the entire sample rather than that of sample sub-sets.

2. The following comprise the more frequently used information sources: colleagues in one's own school system; principals and vice-principals; contacts at professional meetings; superintendents, and curriculum specialists. Generally, the emphasis is upon sources close to home. Least frequently used at the time of this survey were the Federally funded training and R&D programs.

3. Modes of communication, when obtaining information for planning, tend to be of the informal variety whether when contacting colleagues in one's own system or in other school districts. However, texts and curriculum materials from outside sources also provide a basis for interaction and information exchange.

4. Certain problems are attendant upon the utilization of educational information such as: Interpreting statistical results of studies prior to adoption of findings; understanding procedures in getting material from information systems; and getting structured information from school systems where change is occurring.

5. Respondents in different position categories vary in their involvement in the decision-making process with reference to 24 areas of educational planning (salary scheduling, teacher's assignments, building planning, instructional methods, etc.).

Superintendents and principals average the highest levels of involvement in decision making in all areas. The pattern for district staff personnel seems to be similar to that of superintendents. Teachers show the lowest levels of involvement in all areas. Superintendents and their staffs are concerned with long range planning while principals and teachers exercise more decision prerogatives in school and classroom functions.

6. Of 40 educational decisions, the five regarded as more important include decisions to hire new teachers; terminate teaching personnel; install new curricular innovations; recommend new curricula to higher echelons; and decisions to alter student-teacher ratios.

7. "Stumbling blocks" to effective decision-making which received the greater concern of respondents included: lack of sufficient time to study problems; excessive focus on financial aspects of decision-making; need to satisfy many diverse groups; lack of qualified skills to provide research support; and failure to define goals in "operational" or measurable terms.

8. Six educational planning areas were presented with listings for each one of information which might be relevant to the planning function. The information was rated for its "importance" and "difficulty to obtain." The most "important" information item and the one most "difficult to obtain" will be presented with each planning area as derived from a rank-ordering of information items. Full treatment of all planning areas will be found in Section VIII, Detailed Findings of the Study.

Educational Planning Area	Information Highest In "Importance"	Information Most "Difficult To Obtain"
1. Curriculum Planning and Development	Effectiveness of current curriculum	Validation of new curriculum prior to adoption
2. Adopting new Methods of Instruction	Requisite teaching & administrative skills	Time and effort involved in teacher re-training
3. Evaluating the Educational Program	Identifying objectives in measurable terms	Identifying objectives in measurable terms
4. Planning New Buildings	New directions in which education is moving	Opportunities for research studies
5. Appraising Teacher or Administrator Effectiveness	Criteria for an effective appraisal system	Comparability of job assignments for purposes of appraising differences in effectiveness
6. Grouping, Promotion, & Grading Practices	Effects upon students with respect to maturation, achievement, fast learners	Later academic success of students exposed to new innovative methods of grading or grouping

9. Superintendents tend to choose principals and vice-principals, first, and teachers, second, as primary sources of innovation in their school districts. Both principals and teachers tend to perceive themselves as the primary agents of innovation in their school environments. On an overall basis, however, a fair agreement exists among superintendents, district staff, principals and teachers on innovating sources in school districts.

10. When queried on sources external to school districts from which innovations were drawn, a substantial number (26%) answered in the "don't know" category, indicating that many educators may not know the sources from which new ideas are obtained even though they may be aware that innovation is going on in their

own school district. "Programs in other school systems" receive the next highest frequency of responses as a major external source for ideas. New R&D programs which are Federally funded have yet to be perceived as primary external sources. Strong agreement exists among personnel in the four position categories on their ranking of primary external sources of innovative programs.

11. Through application of the "critical incidents" approach, 165 educational projects were described by 121 respondents in which there were evidences of planning breakdown attributable to the lack of information or its inadequacy. Over 30% of the projects were concerned with curriculum planning; 26% were concerned with problems of grouping, non-graded instruction and individualized instruction. Other projects which could have profited from more information included flexible scheduling, projects funded under various titles in the Federal acts, merit systems, and building planning.

    The information which was identified as inadequate or lacking was grouped into 3 major categories of instruction, evaluation, and staffing. Information was held to be most lacking on reading instruction, grouping, science programs, flexible scheduling, and salary scheduling and performance evaluation. These have been presented in descending order of needs and were the five types of information which were most prominently needed.

The main findings which have been presented above require some interpretation. They mainly represent trends for the total sample of respondents. It is the trend or pattern which has caused certain findings to be singled out for discussion and not because they were distinguished from other results on the basis of statistically significant differences. In most cases, the appearance of certain items in the discussion is based upon their higher positions in the rank-ordering of an item array. The rank-ordering was based upon scores which were achieved by the total sample on all items connected with particular survey questions. This procedure receives full treatment in Section VIII, Detailed Findings of the Study.

III INFERENCES FROM THE STUDY

The main objectives underlying this study were the identifying of critical decision processes in the field of education, and the information sources and kinds of information which are used to support decision-making and planning. The assumption was made that findings could be ordered in a way which could be communicated to designers of information systems, with decision levels identified on the field, and with each level appropriately supported by an inventory of decision areas and related informational requirements. This objective has not been met in its entirety for several reasons: First, we have doubts that education may be ordered into discrete hierarchies at a time when new roles are being defined and new role relationships are being developed. There are some well defined decision prerogatives in the field, but for many areas there seems to be a diffusion of responsibilities. We think, also, that we have detected an impatience with the notion of single decision nodes in an environment where committee and programmatic actions seem to be the order of the day. These may be intuitive reactions to the results obtained but also are based upon brief discussions during our field contacts.

Another assumption was that there was something different among the position categories studied with respect to their information "value systems" the sources they used and their perspectives on decision-making problems. It turns out, instead, that we are in what the psychologist calls a "highly correlated domain" where everything is correlated with everything else. Certain traditional sources of information have arisen in the educational field, certain problems are in the ascendancy and of concern to all, and people of all position categories insist upon talking to each other and using the same well-worn information sources. This may create a disturbance to the scientist who is looking for order in the educational universe. This is not to deny that there may be order in the educational decision processing/informational requirement sphere. It is simply that the order which is there may not be strictly amenable to statistical sorting but that people in the field have acquired learned responses for getting information.

However, at the risk of "re-discovering the wheel," we have documented some of the processes of obtaining and communicating information and some problems inherent in the decision-making process itself have been identified. We also have learned that information is not just information. It means a lot of things, including the need for comprehensive results of research studies which can hardly be dismissed under the generic term of information. This is because the term "information" implies that there is something "closed-end" about it, that it need only be placed in the hands of the recipient, or decision-maker, and that he can take it from there. This is very rarely the case, especially with respect to research and it is not surprising, therefore, to see the field turning toward new organizational arrangements for implementing educational R&D and for putting research into practice.

Despite our pessimism on reducing decision processes and informational requirements to scientific order, there is no question that further study should be devoted to determining salient informational requirements for administrative, instructional/curriculum, teacher training, planning, and the like. There is no reason to believe that traditional ways for getting information and for the sorting of information are the most efficient. Many school districts simply lack the manpower to carry out such processes. We have discovered that lay educational personnel do not avail themselves of informational sources which were found to be very fruitful to us in the phase which preceded the field study and which primarily was concerned with a literature investigation. In an era of burgeoning research and development, and with the so-called "information explosion" upon us, there is no reason why planners and decision-makers should be forced to rely upon their prior experiences and intuitions alone when the hard experiences of others in similar project areas may have been documented and would be at their disposal if only they knew they existed. It is important, also, to realize that the field of education, like many other fields, is undergoing a proliferation of roles, many of which include new management and planning functions. For many reasons, younger people are ascending to roles which are new to them without having acquired the experiences of their predecessors. In other words, their reservoir of experience and perhaps intuitions, are relatively thin as contrasted to job responsibilities. It is almost unnecessary to mention that this gap may be made up by making available to them timely information which is appropriate to their planning requirements. This points to the role of information systems in education. But the information system cannot do the job by itself. It is no better than the information which it stores despite its electronic elegance. This is one reason why operators of large Federal centers of health and educational statistics are closely scrutinizing the utilization rates of their outputs and are trying to determine those present and future needs which they should be meeting among their users. Such endeavors would imply that new educational information systems should have "user modules" designed into them so that for whatever limited storage of information/data they begin life with, they will have a continuing process of evaluation with respect to user identities, user frequency of accessing the system, information data accessed most frequently according to some categorization, frequency of need to update information and the like. As the system grows, therefore, the increasing documentation which is stored will have been selected for computerization on the basis of meeting viable field needs.

Another inference from this study is that functional modes of interaction have arisen among educators, whether they are proximal to each other or at some geographical distance from each other. These modes are used to energize each other with ideas, innovations, and findings. Computerized systems should seek to incorporate these modes rather than to "destroy" them. We are saying that designers of information systems should provide for linkages which will enable distantly located school districts to literally "talk" to each other through the computer since, as indicated earlier, very few findings succeed in standing by themselves. "Real-time" equivalents to such eventualities already are occurring in time-sharing computers.

IV DESCRIPTION OF THE SAMPLE

Characteristics of the Respondent Sample

For the purposes of obtaining a broad representation of educational personnel, individuals performing four different functions in a school district were surveyed. In the initial planning these were to be represented in the following proportions.

Table 1

The Initially Planned Sample

Number	Percent	Planned Sample
140	16%	Superintendents and assistant superintendents
140	16	District staff personnel--specialists or consultants in curriculum and instruction
280	34	School principals or vice principals
280	34	Teachers
840	100%	

The total initially planned sample consisted of educational personnel of those types indicated above, by position, and in accordance with those numbers which have been presented. In view of the number of districts which were available for this study, the following numbers for each district were established:

Table 2

Number to be Surveyed in Each School District

Superintendents and assistant superintendents	2
District staff personnel	2
Principals	4
Teachers	4
Total	12

Below the level of superintendent and assistant superintendent, a random sample procedure was planned. Since responding to the questionnaire was to be voluntary, initial plans also called for adding at least two or three additional people in the categories of district staff, principals and teachers.

The Actually Obtained Sample

The sample which was actually obtained is shown below. The difference between what was obtained and what was planned is probably a result of two factors: (1) school districts inability to participate for a variety of reasons; and (2) normal attrition rates which attend all survey questionnaire studies.

Table 3

The Final Sample

Number	Percent	Type by Position
48	12%	Superintendents and assistant superintendents
64	16	District staff personnel
134	35	Principals and vice principals
142	37	Teachers
388	100%	

Rate of Return

Approximately 675 questionnaires were distributed. This was less than the number which was planned originally, but the reduced distribution was due to the inability of several districts to participate and the limited numbers of personnel available to participate, especially at the echelon of assistant superintendents and district staff in small districts. Of the original 675 questionnaires 388 were returned for a response rate of 57%.

Educational Experience Represented In The Sample

Table 4 presents the levels of total experience in the field of education for the sample. These totals include teaching experience for those who were no longer teaching but had gone into other educational functions. The results for 370 respondents are presented since approximately 20 questionnaires were returned with insufficient information on eductional experience.

Table 4

TOTAL YEARS OF EDUCATIONAL EXPERIENCE FOR FOUR CATEGORIES OF EDUCATIONAL PERSONNEL

	Superintendents	Principals	District Staff	Teachers	Total
40 and over	2	1	2	0	5
30-39	11	13	6	2	32
20-29	17	22	16	8	63
10-19	18	78	33	42	171
5-9	0	16	4	46	66
0-4	0	1	0	32	33
Total	48	131	61	130	370
Average Level of Experience in Years	24.4	17.9	20	15.7	

The mean level of experience for the entire sample was 16.4 years, with a trend of increasing experience as one moves from teaching into other administrative or specialized roles.

Level of Education Preparation Represented in the Survey Sample

Table 5 presents the level of educational preparation in the survey sample. Approximately half (56%) of the sample reported possession of an M.A. degree, with 36% having a Bachelor's degree, and 8% reporting the Ed.D. or Ph.D. Practically all of those reporting doctorate degrees were at district staff level and above. Principals and vice principals made up approximately half of all those reporting possession of a Master's degree.

Table 5

LEVELS OF EDUCATIONAL PREPARATION REPRESENTED IN THE SURVEY SAMPLE

Highest Degree	Ed.D. or Ph.D.	Master	Bachelor	Total
Superintendents or assistant superintendents	15	31	2	48
District staff	11	42	11	64
Principal or vice principal	4	118	12	134
Teacher	0	28	114	142
Total	30	219	139	388
Percent at each level of educational preparation	8%	56%	36%	100%

Characteristics of the School Districts from Which the Sample Was Drawn

The sample was drawn from 63 school districts in the San Francisco Bay Area. County representation and the number of school districts, by type, is shown below:

Table 6

DISTRICT REPRESENTATION BY COUNTY IN THE STUDY

	Alameda		Santa Clara		San Mateo		Total	
	Participating	Available	Participating	Available	Participating	Available	Participating	Available
Elementary districts	2	4	18	24	15	17	35	45
High school districts	1	1	5	5	3	3	9	9
Unified districts	12	14	4	5	3	3	19	22
Total	15	19	27	34	21	23	63	76

The selection was based upon a preliminary study of the distribution and type of school districts in each county. There are 76 school districts in the three counties of the types indicated in Table 6. Some districts were small, with a lack of differentiation of role among some of the positions so they were eliminated. A crude cut-off of 300 students was adopted and 7 districts were eliminated from consideration in the final sample. The 70 remaining districts were further reduced to 63 due to inability of some districts to participate for various reasons.

Elementary school districts comprise the predominant number in the sample (35 out of a total of 63 districts in the study). The inclusion of types of school districts, by percent, is as follows:

Table 7

District Sampling

Type of District	Percent
Elementary	56%
High school	14
Unified	30
	100%

Average Daily Attendance (ADA) for the 63 School Districts Surveyed

Table 8 presents the distribution of average daily attendance (ADA) in the 63 school districts which participated in the study. The median ADA for all districts was approximately 5,700. The size of districts ranged from approximately 300 to 62,800 students; 93% of the school districts had student populations of less than 25,000.

Table 8

DISTRIBUTION OF ADA IN SCHOOL DISTRICTS PARTICIPATING IN THE STUDY

ADA Level	No. of School Districts at Each ADA Level
60,000 +	1
55,000 +	0
50,000 +	0
45,000 +	0
40,000 +	0
35,000 +	0
30,000 +	3
25,000 +	0
20,000 +	2
15,000 +	1
10,000 +	15
5,000 +	11
below 5,000	30
Total	63

Median ADA for all School Districts is approximately 5,700

Cost Per ADA for School Districts in Study

Table 9 presents the distribution of cost per average daily attendance (ADA) for 63 school districts. The range was from $442 to $1393, The average was $629, with a standard deviation of $154.35. Approximately 68% of the district sample fell between the limits of $475 to $738. Approximately 14% of the district sample was between the limits of $320 to $474, 68% located within $475 to $737, and an upper 14% was within $738 to $992. These account for about 96% of the sample, or 60 of the 63 school districts included in the study.

Table 9

DISTRIBUTION OF COST PER ADA FOR 63 SCHOOL DISTRICTS

Cost per ADA	Frequency
1300-1399	1
1200-1299	0
1100-1199	0
1000-1099	0
900-999	2
800-899	3
700-799	9
600-699	19
500-599	18
400-499	11
Total	63

Note: Average cost per ADA: $629
Standard deviation: $154.35

V DESCRIPTION OF THE QUESTIONNAIRES ON WHICH RESPONSES WERE OBTAINED

The multiple purposes of this study have been described in Section I. To fulfill these purposes, a series of questionnaire items were developed. (See Appendix B for copies of the questionnaires.) Since the number of questions which passed a final screening was too large for a single questionnaire, two parts (Forms A and B) were designed for administration to separate but comparable groups of educational personnel. The questionnaires were pilot-tested and it was ascertained that approximately 20 minutes would be required to complete each form.

The information which each question was intended to elicit is described below together with the form of the survey in which it was included.

Description of Question	Form A	Form B
Sources of Information for Educational Planning and Decision-Making--responses indicated the frequency with which each of 26 educational sources (curriculum specialists, consultants, university professors, Title III Centers, professional libraries, etc.) have been used.	X	
Modes of Communication Used in the Process of Educational Planning and Decision-Making--responses indicated the frequency with which 16 modes of communication have been used.		X

Description of Question	Form A	Form B
Problems Involved in The Interpretation and Utilization of Education Information--responses were required on 14 problems attending information utilization with respect to level of difficulty encountered.	X	
Extent of Involvement in Decision-Making--24 educational planning areas were presented and respondents indicated the extent of their own involvement in each planning area, e.g., teacher selection, planning school plant expansion, methods of instruction, building rules and regulations.		X
The Incidence of Breakdown in Educational Planning from the Lack of Adequate Information--if situations had been experienced in which this had occurred, a description was requested of the project and the information which was lacking or inadequate.	X	X
Educational Decisions Rated for Their Importance--40 specific educational decisions were presented and were rated for their importance in the general context of the educational process and functioning of school systems.	X	

Description of Question	Form A	Form B
Deterrents to Effective Educational Decision-Making--18 conceivable "stumbling blocks" to educational decision-making were rated according to their degree of severity. "Stumbling blocks" included excessive focus on financial aspects, need to satisfy diverse groups, problem definition, and the like.		X
Educational Planning areas were presented, with each supported by examples of relevant information; the importance to planning of each information example was indicated. Planning areas were curriculum planning, new methods of instruction, evaluating effectiveness of teachers and administrators, etc.	X	
Difficulty in Obtaining Information Which May be Relevant to Educational Planning--the same 6 planning areas and related information examples were presented and responses were intended to indicate the difficulty which might be encountered in obtaining each kind of information.		X

Description of Question	Form A	Form B
Internal (within the School District) and External Sources of Information Relevant to Innovation--16 innovations (new math programmed learning, flexible scheduling, etc.) were presented and indications were provided on internal sources (teachers, principals, etc.) responsible for innovating; external sources (universities, other school districts, etc.) of ideas also were identified.	X	X

VI FIELD CONDUCT OF THE STUDY

The field phase of this study was preceded by a letter from the Far West Laboratory sent to the superintendent of each school district whose participation was desired. This letter explained the purpose of the study, that districts could expect visits by SRI representatives, and asked the cooperation of all districts in the survey.

SRI representatives entered the field and began district contacts after district personnel had been given an opportunity to digest the contents of the Far West letter. If a district agreed to participate, the SRI representative made a random selection of teachers, principals, district staff personnel, and assistant superintendents through personnel rosters which were requested. In many districts, a random draw was not possible and it was necessary to take all personnel in a specific category if the minimal numbers required from each district were to be met. This procedure was common in the categories of assistant superintendents and other district staff.

Each individual identified in the selection process received a packet. This packet contained the questionnaire, instructions, a brief description of the study, and a franked envelope for return of the completed questionnaire to Stanford Research Institute. It was stated that participation was entirely voluntary but the cooperation of each individual was urged. School districts were not asked to maintain any records on the rate of response among their personnel. Responses were completely anonymous, requiring only information on education, position, experience, age, and the like.

The field phase of this study began during the second week of May 1968 and ended during the last week of May 1968. Approximately four weeks were required for distribution of almost 675 questionnaires. All district contacts were made during the normal work day. Seventy districts were contacted although eventual participation was reduced to sixty three districts.

Returns of completed questionnaires began approximately two weeks after initial district contacts were made. Returns were considered final during the last week of June 1968. Preparation of questionnaires for card punching was complete approximately one week later and computer runs were begun. Computer print-outs of tabulated data were available by the middle of July and statistical compilation of results was begun at that time.

VII METHOD OF ANALYZING THE QUESTIONNAIRE RESULTS

The following procedure was applied to all questionnaires in both questionnaire forms with the exception of two questions--one which was concerned with a "critical incident" approach to identifying situations in which there was a breakdown in education planning due to the lack of information; and, the last question in each form which was concerned with internal and external sources of innovation.

General Method of Analysis Applied to Questionnaire Results

In the discussion, items will be distinguished from questions since they are the line elements of each question and were in fact the basis of analysis rather than the total question.

Analysis of Each Item Within Questions

Each item was analyzed by position response (superintendent, district staff, principal, teacher), with educational experience, ADA level and cost per ADA of ones home district not considered. This analysis yielded for each item the:

1. Number in each position category responding on each scale point, e.g. "high frequency", "low frequency".
2. The percent in each position category responding to each scale point.

3. An average score for each type of personnel on each item as a result of averaging arbitrary values assigned to each response, i.e., a "4" to "high frequency" responses and a "1" to "low frequency" responses.

This analysis allowed for a comparison of responses for each item among the four positions with respect to frequencies of responses to each alternative and average score for each item.

Analysis by Educational Experience Level with Position, ADA, and Cost Per ADA Characteristics of Districts Not Considered

The data were assembled on responses to each item as was described for positions above. In this instance, however, scores and frequencies were determined for each of several experience levels since position differences were not considered.

Item Analysis According to ADA with Other Factors Not Considered

Four levels of ADA were used to score individuals according to the size of their respective districts. Each item was then analyzed for its frequency and percent responses for each alternative and an average score on the item for each of the four groups of respondents corresponding to the four ADA levels was computed. This allowed for comparisons in responses to every item among groups representing four different levels of ADA with other factors not considered.

Item Analysis by Cost Per ADA

The same procedure was followed as for ADA with the exception that groups were sorted out according to four levels of cost per ADA and the responses and item scores calculated for each of four cost per ADA groups.

Combining of Responses for Each Item Independent of Position, Experience and Characteristics of District

The data on each item were combined to reflect the following for the total sample:

1. Number of the total sample responding to each alternative
2. Percent of the total sample responding to each alternative
3. An Average score for each item for the total sample, based upon arbitrary values assigned to each response.

Re-ordering of Items Within Questions in Descending Order According to Average Score Attained by the Total Sample on Each Item

Results for the total sample with respect to each item are reported in the Detailed Findings. Frequency and percent response data for each item are in Appendix A. The items within each question have been rearranged in descending order according to the mean score for the total sample in each item. This allows for a relative comparison of items within a question by relating the mean score to the arbitrary value assigned to each alternative. In this way the impact of each item may be discovered with respect to "high frequency," "high importance," etc., or whatever is implied in the continuum against which each item was rated by the total group of 388 respondents.

Method of Analyzing the "Critical Incidents" Question on Breakdown of Planning Due to the Lack of, or Inadequate, Information

In this question respondents described their own experiences with educational planning in which projects suffered from either the lack of information or inadequate information. Responses were sorted according to the nature of the project in which planning had been impeded due to the lack of appropriate information. A determination was made of the frequency with which each affected project was reported for the whole sample of respondents and for each of the four respondent groups. This allowed for an analysis of reported projects with respect to the type of position held in the educational field.

A further sort was made of the information held to be lacking and which, therefore, had a marked effect upon project planning. The information items held to be critically lacking in planning were sorted initially according to the four respondent groups so that unique needs for information could be identified which were related to positions held in the educational field. Then responses for all respondent groups were summarized into a single table so that common areas of information needs could be perceived. Although a precise fit could not be achieved, it was found convenient to group the information items into four categories corresponding to Evaluation, Instruction, Staff Problems, and a Miscellaneous category representing a residue of information items.

Method of Analyzing Responses to the Question on Internal and External Sources of Innovation in School Districts

In this question, 16 innovations were presented and respondents were asked to indicate the internal source (teacher, principal, educational specialists, etc.) which was responsible for the introduction of each innovation. Responses were to be made only to those innovations which had been adopted. External sources (other school systems, State Department of Education, etc.) from which the innovations were drawn, also were identified for each adopted innovation.

Frequencies were tallied by respondent groups (superintendents, district staff, principals, and teachers) for each innovation with respect to the total number of responses appearing opposite each internal source and external source. The range of frequencies for each source was transformed into a rank ordering. It was possible, therefore, to determine for any respondent group the hierarchy of sources of innovation which it perceived, both internal and external to school districts.

The next step was to sum the frequency of responses for each group for all innovations and to rank order the summed frequencies. This analysis revealed that teachers, for example, awarded themselves Rank 1, or first rank, as the primary agents within school districts who were responsible for innovation.

Finally a determination was made of the extent of agreement among the four respondent groups on sources of innovation. Rank orderings for all groups were assembled into a single matrix and a "coefficient of agreement" was calculated. This procedure was followed separately for internal and external sources of innovation.

VIII DETAILED FINDINGS OF THE STUDY

The Prediction of Questionnaire Responses by Position, Level of Experience, Average Daily Attendance (ADA), and Cost Per ADA

The Scoring of Individuals According to Their Characteristics and Responses to Each Question

For purposes of analysis, the survey sample was structured according to the following:

Position	Educational Experience	A.D.A.	Cost Per A.D.A.
Superintendent or Assist. Supt.	40 yrs or more	11,150 and above	$750 and above
	30 to 39 yrs	5,200 to 11,149	620 to 749
District Staff	20 to 29 yrs	2,800 to 5,199	550 to 619
	10 to 19 yrs	2,799 and below	549 and below
Principal	5 to 9 yrs		
	0 to 4 yrs		
Teacher			

Each person in the sample was scored according to his position category, his experience level, the ADA for his school district according to one of 4 levels of ADA which were defined for all districts, and the cost per ADA of his district according to one of 4 levels into which it was divided.

An average score was derived for each individual on each question by arbitrarily assigning values to responses. For example, if an individual indicated that he used a source of information with "Moderate Frequency," he would receive a score of 2, but if he checked "High Frequency," he would receive a score of 3. The average score for each question, therefore, consisted of summing scores representing responses made to all items within a single question and then dividing this sum by the total number of responses possible in a question. This was done for all individuals answering all items within a single question and then combining the average scores into a single distribution. A distribution of average scores for all individuals was derived for each question.

The Correlation of Individual Factors with Averaged Questionnaire Responses

The method of correlation was adopted for determining whether there were significant differences in responses to each question as a function of the four factors of:

Position differences (teachers, principals, district staff, superintendents)

Levels of experience

District ADA

Cost per ADA in the school district

If a high correlation was found between any one of these factors and the averaged scores for all individuals replying to all the items comprising a question, this finding indicated the need to make a closer statistical examination of responses in the question. Finding a high correlation between the factor of position differences and the average scores for a question, for example, would require testing statistically for differences between groups, e.g. Teachers vs. district staff, on selected items within the question. Other combinations of group comparisons also would be tested in a similar way. The same procedure would be required if other factors: experience, size of district, cost per ADA yielded appreciable correlations with responses to questions. There also was the added interest of determining what the multiple correlation was between all four factors and scores on each question, when the intercorrelations among the factors themselves were taken into account.

Table 10 presents the relationships expressed in correlation terms, of the four factors and averaged responses to each question. The multiple correlation (R) or maximum prediction, which may be expected from the four factors follows. The percentage of variance accounted for, or R^2, is also presented. This is an indication of what proportion of the average scores for each question may be accounted for by the combining of the four factors into a single prediction equation. A low R^2 would indicate that question responses were attributable to other factors than those considered in the study.

Major trends appear with respect to two questions. The first question is that in which individuals in each class (supt's, district staff, principals, teachers) were asked to indicate the frequency with which they used educational sources (people and places) to derive information for use in planning or decision--making. The correlation of .49 between position differences and averaged scores on the question was interpreted as an indication that the sources listed tended to be used with greater frequency by those in position levels representing greater responsibility for planning. The multiple correlation of .51 approximated the correlation due to position differences, leading to the conclusion that position is the more important contribution to variance of the four factors which were correlated with scores on this question. R^2, or percent of variance accounted for, was .26, which makes it necessary to recognize that none of the factors had great effects upon the frequency with which the presented sources were used as a preface to planning. Position differences alone in education are not sufficient to explain how sources listed in this question are utilized.

The next question showing a relatively high correlation with at least one of the factors is the fourth one listed which is concerned with levels of participation in decision-making. The correlation of .41 between position differences and this question indicates the trend of more involvement in the decision-process as one moves closer to responsibilities at the superintendent level. The addition of other factors adds very little to the multiple correlation which is .46. All four factors succeeded in accounting for only 22% of the variance in scored responses to the question, leading to the conclusion, as discussed in connection with the previous question, that neither position nor other factors considered are major contributors in determining the extent of decision involvements for the four educator groups in this study.

The correlations of the four factors in all other questions were minimal although several of them were significant statistically. ADA and cost per ADA apparently have very little to do with the activities, sources, information utilization, etc., receiving primary focus in this study. The habits, observations, and levels of involvement in the general context of information utilization, planning, and decision-making seem to be more a function of the position which is held in the field. Even in the case of the latter, however, if it were to be used for prediction, the major portion of the variance in responses to the questions would still not be accounted for.

To be of practical significance, the correlations would have to be much higher. Thus, since most of the correlations were so low that it was felt justifiable to combine the data for all 4 groups representing the four positions which were sampled rather than to conduct separate tests for this factor or any of the others. Subsequent tables representing the results obtained in response to each question, therefore, will present findings for combined samples.

TABLE 10

INTERCORRELATIONS AND MULTIPLE PREDICTION OF FOUR FACTORS (POSITION DIFFERENCES, EXPERIENCE, ADA, COST PER ADA) AND AVERAGED SCORES ON EACH QUESTION

Question Content	Four Factors				Multiple Correlation R	Percent Variance Accounted for R^2	N
	Positions	Experience	ADA	Cost Per ADA			
Sources of information used for educational planning and decision-making	.49(1)	.22(1)	.07	.06	.51(1)	.26(1)	183
Modes of communication (types of reports, interactions, etc.) used in deriving information for educational planning and decision-making	.31(1)	.28(1)	.04	.09	.36(1)	.13	210
Problems which are perceived in the utilization of educational information	.18(1)	.15(2)	.03	.08	.22(2)	.05	183
Levels of participation in the educational decision-making process	.41(1)	.24(1)	-.10	-.03	.46(1)	.22(2)	210
The rating of decisions on their importance in the general context of education	.08	.03	.03	.06	.11	.01	183
Rating of factors which are viewed as "stumbling blocks" to decision-making	-.08	-.06	.13(2)	-.03	.17	.03	210
Information requirements rated for importance in curriculum planning and development	.25(1)	.22(1)	.03	.00	.31(1)	.09	183

Question Content	Four Factors				Multiple Correlation R	Percent Variance Accounted For R^2	N
	Positions	Experience	ADA	Cost Per ADA			
Information requirements rated for importance in adopting new methods of instruction	.19$^{(1)}$	.13$^{(2)}$	.13$^{(2)}$	-.09	.25$^{(2)}$	.06	183
Information requirements rated for importance in evaluating the instructional program	.18$^{(1)}$	.16$^{(2)}$	.00	-.02	.23$^{(2)}$	.05	183
Information requirements rated for importance in planning new buildings	.20$^{(1)}$	.20$^{(1)}$	.03	.16$^{(2)}$	.29$^{(1)}$	.08	183
Information requirements rated for importance in appraising teacher or administrator effectiveness	.03	.08	.11	.05	.14	.02	183
Information requirements rated for importance in grouping, promotion and grading practices	.15$^{(2)}$	.12	.02	.01	.17	.03	183
Information requirements rated "difficult to obtain" in curriculum planning and development	.15$^{(2)}$	.09	.05	-.05	.17	.03	210
Information requirements rated "difficult to obtain" in adopting new methods of instruction	.12	.17$^{(2)}$	-.06	-.06	.23	.05	210

Question Content	Four Factors				Multiple Correlation R	Percent Variance Accounted For R^2	N
	Positions	Experience	ADA	Cost Per ADA			
Information requirements rated "difficult to obtain" in evaluating the instructional program	.13(2)	.15(2)	.05	-.10	.21(2)	.05	210
Information requirements rated "difficult to obtain" when planning new buildings	-.06	.03	-.01	-.06	.10	.01	210
Information requirements rated "difficult to obtain" for appraising teacher or administrator effectiveness	.14(2)	.13(2)	-.06	.05	.19	.04	210
Information requirements rated "difficult to obtain" when planning grouping, promotion and grading practices	.23(1)	.04	.00	.01	.23(2)	.05	210

---

(1) = significant at .01 level of confidence

(2) = significant at .05 level of confidence

Inter-Correlations Among the Four Factors

Table 11 presents the inter-correlations of position levels experience, ADA levels, and cost per ADA levels.

Table 11

INTER-CORRELATIONS OF FOUR FACTORS (POSITION DIFFERENCES, EXPERIENCE, ADA AND COST PER ADA)

(N = 388)

	Position	Experience	ADA
Position			
Experience	.27(1)		
ADA	.09	.09	
Cost per ADA	.02	.13(2)	-.12(2)

---

(1) Significant at .01 level of confidence.
(2) Significant at .05 level of confidence.

The table indicates that position levels and experience were correlated to the extent of .27 in our sample. This is in the expected direction since the assumption of added responsibilities usually is associated with greater experience. The other inter-correlations are so minimal that they may be ignored. All experience levels were represented in all school districts included in the study and individuals representing the four positions were deliberately selected in all districts. Also, ADA and cost per ADA showed no covariation of significant amounts.

Sources of Information Used for Educational Planning and Decision-Making

Frequency of use of various sources of information was determined in this question. Twenty-six sources were listed and each respondent was asked to indicate how frequently these were used on a four-point scale. The points were weighted arbitrarily as follows: (1) have never used this source; (2) with little frequency; (3) with moderate frequency; (4) with high frequency. The position categories accounted for about 25% of the variance in the mean as indicated by the regression analysis.

The range of responses was quite large, running from a mean, based on the weightings, of 1.15 (hardly used) to 3.42 (moderate to high frequency use) Table 12. Sources most frequently used (in descending order) included: (a) colleagues in same school system; (b) principals and vice principals; (c) professional meetings; (d) curriculum specialists; (e) school district superintendents, assistant superintendents (direct contact). Least frequently used sources (in ascending order) included: (a) Title IV Centers; (b) industrial training programs; (c) University R&D Centers; (d) Title III Centers (PACE); and, (e) Federal education programs (MDTA, Job Corps, etc.).

The pattern here is quite clear. Sources close to home and, therefore, presumably readily available predominate. Further, all of the first five in frequency of use involve direct person-to-person contact. More distant sources where personal contact is difficult or where the persons involved are probably not well known to the respondent tend to be little used. The little used sources also tend to be those whose output is in printed form, requiring both search activities and time to read and digest. There may be elements of credibility and acceptability here also, in that personally known sources can be evaluated more directly and reliability of information assessed more readily.

SOURCES OF INFORMATION USED IN EDUCATIONAL PLANNING AND DECISION-MAKING

	Have Never Used This Source (1)	With Little Frequency (2)	With Moderate Frequency (3)	With High Frequency (4)
Colleagues in same school systems			3.42	
Principals and vice-principals			3.33	
Professional meetings (annual, semi-annual, etc.)		2.96		
Curriculum specialists		2.85		
School district superintendents, asst-superintendents (direct contact)		2.82		
Directors of Instruction		2.66		
Local professional educational libraries		2.54		
County Offices of Education		2.47		
Educational consultants (inside school system)		2.45		
Colleagues in other school system		2.40		
Publishers of educational texts		2.30		
Teachers associations or unions		2.23		
Local citizens and community groups		2.20		
School Boards		2.16		
Academic department heads		2.13		
University libraries		2.13		
University professors		2.10		

	Have Never Used This Source (1)	With Little Frequency (2)	With Moderate Frequency (3)	With High Frequency (4)
State Department of Education		2.09		
Local public libraries		2.07		
Educational consultants (from outside of school system)	1.95			
Research office at school level	1.69			
Federal education programs (MDTA, Job Corps, etc.)	1.43			
Title III Centers (PACE)	1.39			
University R&D Centers	1.35			
Industrial training programs	1.29			
Title IV Centers	1.15			

Forms of Communication (reports, interactions) Used in Obtaining Information for Planning and Change

The results which follow in Table 13 were obtained in response to the question:

What forms of information, types of reports, communicative acts, etc., have you typically employed in the process of arriving at educational decisions, in planning, or in innovation and change?

Responses were made against a four-point scale with respect to usage, varying from high frequency of usage to never having used modes of information or communication.

The scoring system consisted of awarding an arbitrary score of 1 through 4 to each individual, with the highest score associated with the High Frequency response, and then determining an average for the total group. The possible range is calibrated in Table 13 and the mean score for the total group answering this question is plotted beneath this scale separately for each item.

Several observations may be made by examining the extreme reflected in Table 13. There are indications that:

> Communicative acts with other educational personnel both within one's school system and in other school systems results in information leading to decision-making or planning of change.
>
> Texts and curriculum materials from outside sources are used as the basis for planning. These may stem from other school systems or published sources.

Materials used as a basis for change may be obtained in informal ways in addition to formal sources such as published studies in educational journals. Informal modes of communication seem to be favored.

New systems such as ERIC and newly organized structures such as Title III or Title IV Centers are not perceived as providing material for planning. The latter are new entrants upon the educational scene and it may be too early to expect that lay educators are using reports from these sources. Also, much of the endeavor of these sources is still in its developmental stages.

Very little resort is made to M.A. theses or doctoral dissertations, due perhaps to the fact that these are found in unpublished sources and very rarely are intended to meet the real-time requirements of decision-making.

FREQUENCY OF USE OF FORMS OF COMMUNICATION (REPORTS, INTERACTIONS) IN OBTAINING INFORMATION FOR EDUCATIONAL PLANNING AND CHANGE

TABLE 13

For Combined Sample (N=176)

	Have Never Used This Source (1)	Little Frequency (2)	Moderate Frequency (3)	High Frequency (4)
Discussions (formal or informal) with colleagues in same school system				3.63
Curriculum materials from school programs developed elsewhere			3.01	
Professional educational textbooks			2.99	
Personal communication with educators in other school systems			2.98	
Publisher's materials (guides, lesson plans, student handbooks, etc.)			2.90	
Articles in general educational journals			2.86	
Proceedings of professional meetings or symposia			2.85	
Articles in educational research journals			2.83	
Educational newsletters			2.62	
Research studies or other analytical studies conducted within the school system		2.49		
Lecture notes, seminar reports from university courses		2.42		
Formal written reports from other school systems		2.31		
Educational yearbooks		2.02		

	Have Never Used This Source (1)	Little Frequency (2)	Moderate Frequency (3)	High Frequency (4)
Reports from Title III and Title IV Centers		1.70		
M.A. theses or doctoral dissertations		1.64		
ERIC documentation (hard copy or microfiche)	1.31			

Problems Perceived in the Utilization of Educational Information

A variety of problems may be encountered in the utilization of information sources. Questionnaire respondents were asked to indicate how much difficulty they had experienced in each of 14 problem areas. Scaled categories ranged from "have had no difficulty," which was given a weight of '1' for computational purposes; through "have had little difficulty," '2'; and "have had some difficulty," '3'; to "have had great difficulty," '4'. Using these arbitrary weightings, means scores for each item were computed. These are presented in Table 14. The previously described correlational analysis yielded a multiple correlation coefficient of about .22 indicating that variation in all factors combined (position, experience, ADA, cost) contributed only about 4% of the variance. Thus the data may be discussed without reference to categorization by position or any of the other variables.

All means fall within the narrow range of 2.29 to 2.97, indicating that no great difficulty in regard to information utilization was encountered in any of the problem areas. Within this range, the greatest difficulty was in "deciding whether the statistical results of a research study are sufficiently strong to warrant adoption of the findings." This was followed in descending order of difficulty by "understanding the procedures for getting information from ERIC, DATRIX, state information systems, etc.," "getting relevant structured information from systems where change is occurring," "getting source material in time to use it," and "getting the most current information for a project." Note that the first item is concerned with information interpretation, but the other four have to do with information acquisition.

These findings point up one of the major problems in research in many fields, that of using research results, even those which are clear cut, in practical situations. Some 38% of respondents said they experienced great difficulty in this regard.

The finding with respect to the ERIC, DATRIX and other systems may result either from real difficulty in using the systems or lack of familiarity with the systems themselves because of their relative newness.

TABLE 14

PROBLEMS WHICH ARE PERCEIVED IN THE UTILIZATION OF EDUCATIONAL INFORMATION

	Have Had No Difficulty (1)	Have Had Little Difficulty (2)	Have Had Some Difficulty (3)	Have Had Great Difficulty (4)
Deciding whether the statistical results of a research study are sufficiently strong to warrant adoption of the findings			2.97	
Understanding the procedures for getting information from ERIC, DATRIX, State information systems, etc.			2.89	
Getting relevant structured information from systems where change is occurring			2.79	
Getting source material in time to use it			2.69	
Getting the most current background information for a project			2.63	
Determining how receptive my own system would be to program or results of studies accomplished elsewhere			2.58	
Finding appropriate sources of information			2.55	
Trying to determine the trend (change in emphasis or findings over time) which is evident in literature on the problem			2.54	
Resolving differences between conflicting reports			2.45	

	Have Had No Difficulty (1)	Have Had Little Difficulty (2)	Have Had Some Difficulty (3)	Have Had Great Difficulty (4)
Being able to understand research results, curriculum approaches, etc., unless I could personally visit the people responsible		2.44		
Getting help to interpret information in research reports or studies		2.40		
Trying to relate information derived elsewhere to my problem		2.39		
Getting information which is understandable		2.38		
Making information understandable to others		2.29		

Level of Self-Perceived Involvement in 24 Areas of Educational Planning

In this question, respondents were asked to indicate to what extent they had been involved in planning in 24 areas of educational concern.[1] The scale ranged from "have had no involvement," given an arbitrary weight of '1', through "have provided advice when asked" '2', and "have served with formal groups or committees which have submitted recommendations" '3', to "have been given formal authority to make decisions or develop policy" '4'. For this question, the four personnel position groups have been treated separately, since the regression analysis indicated a somewhat more substantial contribution to total variance by the position variable than was the case in most other questions, and because the patterns of response to the various areas of educational planning were quite different. Means based on the weights indicated above were computed for each item for each position group.

Superintendents

The range of means for superintendents is from 1.94 to 3.32 (Table 15). About two-thirds of the items are narrowly grouped around the scale point, "have served with formal groups or committees which have submitted recommendations." In descending order, the areas showing the highest involvement are: (1) determining educational needs in the general area served by my school system; (2) evaluating the educational program; (3) curriculum planning and development; (4) appraising teacher or administrator effectiveness; and, (5) organization and content of the curriculum.

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[1] Source: Robert B. Carson, Keith Goldhammer, and Roland J. Pellegrin. Teacher Participation in the Community Eugene, Oregon: Univ. of Oregon, Center for the Advanced Study of Educational Administration, Univ. of Oregon Press, 1967.

LEVEL OF SELF-PERCEIVED INVOLVEMENT OF 27 SUPERINTENDENTS IN 24 AREAS OF EDUCATIONAL PLANNING

TABLE 15

	Have had no involvement (1)	Have provided advice when asked (2)	Have served with formal groups or committees which have submitted recommendations (3)	Have been given formal authority to make decisions or develop policy (4)
Determining educational needs in the general area served by my school system			3.32	
Evaluating the educational program			3.26	
Curriculum planning and development			3.23	
Appraising teacher or administrator effectiveness			3.23	
Organization and content of the curriculum			3.19	
Developing school budgets			3.16	
Teaching assignments			3.13	
Establishing educational objectives			3.13	
Planning school plant expansion			3.13	
In-service education and teacher orientation			3.10	
Selection of new teachers			3.10	
Determining means of financing school plant expansion			3.10	
Planning proposed new buildings and additions			3.03	

	Have had no involvement (1)	Have provided advice when asked (2)	Have served with formal groups or committees which have submitted recommendations (3)	Have been given formal authority to make decisions or develop policy (4)
Grouping, promotion, grade-reporting practices			3.00	
Salary scheduling			2.94	
Selection of instructional supplies			2.87	
Determining method of instruction within classroom			2.87	
Determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school system			2.55	
Building rules and regulations		2.35		
Assignment of children to the various classes, sections or teachers		2.19		
Determining daily schedules for the building in which they teach		2.13		
Room assignments		2.10		
Determining the schedule in the teacher's own room		2.00		
Scheduling of supervisory duties (Playground, lunch, after school)		1.94		

Areas of least involvement, in ascending order, include: (1) scheduling of supervisory duties (playground, lunch, after school); (2) determining the schedule in the teacher's own room; (3) room assignments; (4) determining daily schedules for the building in which they teach; and, (5) assignment of children to the various classes, sections or teachers.

The pattern for superintendents is quite clear. Their primary areas of involvement are in the general planning functions and the carrying out of broad policy and overall organizational objectives. They are substantially less involved, as would be expected, in those planning activities which concern the individual classroom and school building.

District Staff

Educational planning area means for district staff members range from 1.38 to 3.35 (Table 16). About half of the items cluster around the "have provided advice when asked" scale point, as might be expected, since staff members usually function in an advisory capacity and are often called "consultants." Areas in which district staff members have the highest levels of involvement, in descending order, are: (1) curriculum planning and development; (2) organization and content of the curriculum; (3) establishing educational objectives; (4) in-service education and teacher orientation; (5) selection of instructional supplies; and, (6) evaluating the educational program. Three of these areas also appear on the highest involvement list for superintendents, which is consistent with the idea that staff members serve primarily as advisors to superintendents.

LEVEL OF SELF-PERCEIVED INVOLVEMENT OF 25 DISTRICT STAFF IN 24 AREAS OF EDUCATIONAL PLANNING

TABLE 16

	Have had no involvement (1)	Have provided advice when asked (2)	Have served with formal groups or committees which have submitted recommendations (3)	Have been given formal authority to make decisions or develop policy (4)
Curriculum planning and development			3.35	
Organization and content of the curriculum			3.27	
Establishing educational objectives			3.23	
In-service education and teacher orientation			3.19	
Selection of instructional supplies			3.15	
Evaluating the educational program			3.15	
Determining educational needs in the general area served by my school system			3.04	
Determining method of instruction within classroom		2.69		
Grouping, promotion, grade-reporting practices		2.50		
Teaching assignments		2.42		
Developing school budgets		2.31		
Appraising teacher or administrator effectiveness		2.31		
Planning school plant expansion		2.27		

	Have had no involvement (1)	Have provided advice when asked (2)	Have served with formal groups or committees which have submitted recommendations (3)	Have been given formal authority to make decisions or develop policy (4)
Planning proposed new buildings and additions		2.27		
Assignment of children to the various classes, sections or teachers		2.15		
Salary scheduling		2.12		
Selection of new teachers		2.12		
Determining daily schedules for the building in which they teach		2.00		
Determining the schedule in the teacher's own room		2.00		
Determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school system		2.00		
Room assignments		1.81		
Building rules and regulations		1.69		
Determining means of financing school plant expansion	1.42			
Scheduling of supervisory duties (Playground, lunch, after school)	1.38			

Areas of least involvement for district staff, in ascending order, include: (1) scheduling of supervisory duties (playground, lunch, after school); (2) determining means of financing school plant expansion; (3) building rules and regulations; and, (4) room assignments. Again, there is substantial overlap with the superintendents' list of areas of least involvement, with a conspicuous exception being the area of financing school plant expansion, on which apparently, the assistance of staff members is little sought.

The general pattern of district staff members' responses is similar to that for superintendents to whom their services are primarily provided.

Principals

The data for principals show a range of means running from 1.64 to 3.91 (Table 17). This is a wide range, but three-fourths of the items are above three on the scale, indicating that principals feel that they have a heavy involvement in a great many areas. Areas of highest involvement in planning, in descending order, are: (1) room assignments; (2) determining daily schedules for the building in which they teach; (3) building rules and regulations; (4) scheduling of supervisory duties (playground, lunch, after school); and, (5) assignment of children to the various classes, sections or teachers. All of these have to do with the operation of the individual school, for which principals, obviously, have the primary responsibility.

Planning areas for which principals indicate they have least involvement, in ascending order, include: (1) determining means of financing school expansion; (2) determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school

LEVEL OF SELF-PERCEIVED INVOLVEMENT OF 68 PRINCIPALS IN 24 AREAS OF EDUCATIONAL PLANNING

	Have had no involvement (1)	Have provided advice when asked (2)	Have served with formal groups or committees which have submitted recommendations (3)	Have been given formal authority to make decisions or develop policy (4)
Room assignments				3.91
Determining daily schedules for the building in which they teach				3.91
Building rules and regulations				3.90
Scheduling of supervisory duties (Playground, lunch, after school)				3.82
Assignment of children to the various classes, sections or teachers				3.81
Appraising teacher or administrator effectiveness				3.72
Teaching assignments				3.69
Selection of new teachers				3.46
Grouping, promotion grade-reporting practices				3.40
Evaluating the educational program				3.27
In-service education and teacher orientation				3.26
Selection of instructional supplies				3.25
Establishing educational objectives				3.17

	Have had no involvement (1)	Have provided advice when asked (2)	Have served with formal groups or committees which have submitted recommendations (3)	Have been given formal authority to make decisions or develop policy (4)
Curriculum planning and development			3.12	
Determining method of instruction within classroom			3.10	
Determining educational needs in the general area served by my school system			3.07	
Developing school budgets			3.07	
Organization and content of the curriculum			3.06	
Determining the schedule in the teacher's own room		2.91		
Salary scheduling		2.49		
Planning school plant expansion		2.42		
Planning proposed new buildings and additions		2.40		
Determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school system		2.25		
Determining means of financing school plant expansion	1.64			

system; (3) planning proposed new buildings and additions; (4) planning school plant expansion; and, (5) salary scheduling. These items, considered in conjunction with those in which the principal indicates larger involvement, suggest that day to day school operations rather than long range planning are the basic business of the principal in his own view.

Teachers

The range of responses on the various planning areas for teachers runs from 1.08 to 3.40 (Table 18). Most of the responses fall around the scale point for providing advice when asked, suggesting that teachers are not heavily involved in planning.

Areas of greatest involvement, in descending order, are: (1) determining method of instruction within the classroom; (2) determining the schedule in the teacher's own room; (3) selection of instructional supplies; (4) grouping, promotion, grade-reporting practices; and, (5) curriculum planning and development. There is very little overlap with the primary areas of involvement indicated by other categories of personnel, with the exception of the curriculum planning and development area, which appears to be a concern of all personnel categories. Teachers are most heavily involved, as would be expected, in the operations of their own classrooms.

Areas of least involvement, in ascending order, are: (1) determining means of financing plant expansion; (2) developing school budgets; (3) selection of new teachers; (4) determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school system; and (5) planning proposed new buildings and additions; and, (6) planning school plant expansion. Teachers, evidently,

LEVEL OF SELF-PERCEIVED INVOLVEMENT OF 56 TEACHERS IN 24 AREAS OF EDUCATIONAL PLANNING

TABLE 18

	Have had no involvement (1)	Have provided advice when asked (2)	Have served with formal groups or committees which have submitted recommendations (3)	Have been given formal authority to make decisions or develop policy (4)
Determining method of instruction within classroom			3.40	
Determining the schedule in the teacher's own room			3.26	
Selection of instructional supplies		2.77		
Grouping, promotion, grade-reporting practices		2.53		
Curriculum planning and development		2.44		
Organization and content of the curriculum		2.42		
Assignment of children to the various classes, sections or teachers		2.27		
Building rules and regulations		2.17		
Establishing educational objectives		2.15		
Evaluating the educational program		2.12		
In-service education and teacher orientation		2.05		
Determining educational needs in the general area served by my school system	1.98			

	Have had no involvement (1)	Have provided advice when asked (2)	Have served with formal groups or committees which have submitted recommendations (3)	Have been given formal authority to make decisions or develop policy (4)
Salary scheduling	1.85			
Teaching assignments	1.79			
Determining daily schedules for the building in which they teach	1.76			
Scheduling of supervisory duties (Playground, lunch, after school)	1.74			
Appraising teacher or administrator effectiveness	1.60			
Room assignments	1.58			
Planning school plant expansion	1.50			
Planning proposed new buildings and additions	1.50			
Determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school system	1.44			
Selection of new teachers	1.35			
Developing school budgets	1.34			
Determining means of financing school plant expansion	1.08			

have little involvement in long-range planning activities, particularly those outside their own classrooms and schools.

Overall

Patterns of involvement for the various categories of personnel are quite different as shown in Table 19. Superintendents and principals show the highest average levels of involvement in all areas, and teachers the lowest levels. The district staff members' pattern is similar to that of the superintendents whom they advise. Superintendents and staff members are most concerned with long-range planning concerning the district as a whole, while pricipals and teachers are most heavily involved in planning for school and classroom functions. Curriculum planning is a function of all levels.

LEVEL OF SELF-PERCEIVED INVOLVEMENT FOR ALL FOUR POSITIONS IN 24 AREAS OF EDUCATIONAL PLANNING

TABLE 19

	Have had no involvement (1)		Have provided advice when asked (2)		Have served with formal groups or committees which have submitted recommendations (3)		Have been given formal authority to make decisions or develop policy (4)
Salary scheduling			T Ds	P	S		
Teaching assignments			T	Ds	S	P	
Room assignments		T	Ds S				P
Selection of new teachers		T	Ds		S	P	
Determining daily schedules for the building in which they teach			Ds T S				P
Determining the schedule in the teacher's own room			Ds S		P	T	
Scheduling of supervisory duties (Playground, lunch, after school)		Ds	T S				P
Assignment of children to the various classes, sections or teachers			Ds S T				P
Determining method of instruction within classroom				Ds	S P	T	
Planning school plant expansion		T		Ds P	S		
Planning proposed new buildings and additions		T		Ds P	S		

	Have had no involvement (1)		Have provided advice when asked (2)		Have served with formal groups or committees which have submitted recommendations (3)		Have been given formal authority to make decisions or develop policy (4)
Determining means of financing school plant expansion	T	Ds P			S		
Organization and content of the curriculum				T	P SDs		
Curriculum planning and development				T	P S Ds		
Selection of instructional supplies				T S	P Ds		
Developing school budgets		T		Ds	P S		
Evaluating the educational program			T		Ds P S		
Grouping, promotion, grade-reporting practices				DsT	S	P	
Building rules and regulations			Ds T	S			P
In-service education and teacher orientation			T		P SDs		
Appraising teacher or administrator effectiveness		T		Ds	S	P	
Establishing educational objectives			T		P S Ds		

	Have had no involvement (1)		Have provided advice when asked (2)		Have served with formal groups or committees which have submitted recommendations (3)		Have been given formal authority to make decisions or develop policy (4)
Determining educational needs in the general area served by my school system			T		P Ds S		
Determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school system		T	Ds	P S			

Key:

S - Superintendents and assistant superintendents

D_s - District staff personnel (educational specialists and consultants)

P - Principals and vice-principals

T - Teachers

"CRITICAL INCIDENTS" IN THE BREAKDOWN OF EDUCATIONAL PLANNING DUE TO INADEQUATE, OR LACK OF, INFORMATION

Respondents were asked to recall education projects in which the planning had been impeded by either the lack of information or inadequacy of information. It was felt that there might be a history of such projects in which the information needs had not been met. If any consistencies were to appear in the findings, then planners of educational information systems could consider the processing of the needed information or data.

Approximately one-third of the total sample of 388 respondents provided incidents of educational planning where informational problems arose. Inspection of results by position indicated that practically the same percentage of response typified each group, e.g., the percentage of teachers reporting incidents was approximately 30% and equalled the response rates of the other groups. Many respondents described more than one project which was affected by information needs. A total of 165 projects were described by 121 respondents, with principals and teachers being responsible for approximately 63% of all projects described. This is not surprising since these two groups comprised over 70% of the total respondent sample.

Projects Affected by Inadequacies in Information

Table 20 presents findings with respect to projects which suffered from information needs as reported by all four types of respondents. Also shown is the frequency with which each project was reported and the percentage of all reported projects which each one accounted for. Thirty-one percent of all reported projects were concerned with curriculum areas, especially those which were relatively new and innovative. That such projects should be lacking in supportive information is not surprising since validation data, achievement results, cost/benefit analysis, and the like may not be available as yet on such areas; or, if they are available, their findings may be raising questions. Generally, the projects in Table 20 which had information needs seem to reflect new procedures, curriculums, and techniques of recent vintage in education and upon which a firm data base has yet to be established.

If it is granted that most projects, especially those which represent new developments, undergo some form of informational "sufferance," then the results in Table 20 may more properly reflect the involvements of educational personnel in definable areas. Twenty-six percent of reported projects are concerned with the problems of grouping, non-graded instruction and individualized instruction. The heavy involvement in new curriculum has already been noted. Beyond these, a broad spectrum of project involvement seems to be indicated, including preoccupation with projects funded by federal education acts, flexible scheduling, merit systems, team teaching, and building planning.

Summary of Information Perceived to be Inadequate or Lacking by All Respondent Groups

Perceived information inadequacies in project planning are presented separately for each respondent group in Table 21 thru Table 24. The information has been categorized under Evaluation, Instruction, Staffing, and a Miscellaneous Section. The categories of findings for all four respondent groups have been combined next into the single listing presented in Table 25 so that high points of information needs may be discerned for the total sample, and especially those which preoccupy all groups.

From the wide diversity of information needs which are shown in Table 25, several stand out, either because they were noted with greater frequency or because most of the respondent groups were concerned with them.

Informational inadequacies were found to be most prominent in the following nine areas. These are presented in descending order, with the first one, Reading Instruction, having received the greatest mention by respondents:

Reading Instruction
Grouping
Science Programs
Flexible Scheduling
Salary Scheduling and Performance Evaluation
Curriculum Planning
Building Design
Team Teaching

Table 25 also may be interpreted as reflecting areas of concern for all four respondent groups since the information needs stem from projects in which they were involved. In all four groups a need was expressed for more information on non-graded instruction, reading instruction, criteria for salary scheduling, and current trends in building design. Information on non-graded programs, and their evaluation, were the most outstanding of all expressed needs.

EDUCATION PROJECTS IN WHICH PLANNING IMPEDED DUE TO THE LACK OR INADEQUACY OF INFORMATION

Type of Project	Superintendent or Assistant Superintendent	Principal or Vice-Principal	District Staff	Teachers	Total	Percent of Total
Grouping	1	10	2	2	15	9%
Non-graded systems	5	8	2	8	23	14
Flexible scheduling	2	3		1	6	4
Independent study and individualized learning	1	2		1	4	2
Team teaching	1		1	4	6	4
Teacher-class loads; class size	1		2		3	2
Open-area teaching	1	1		1	3	2
Specific course problems[1)]	8	14	9	21	52	31
Program evaluation	1	1	3	1	6	4
Curriculum planning	1	3	2	3	9	5
Performance objectives	1	3			4	2
Four quarter system			2		2	1
Merit system; teacher/administrator evaluation	1	3	2	2	8	5

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1) Specific course problems refer to lack of information about materials, applications, innovation techniques, and time and cost values. Courses include English, reading, math, family living, social science, foreign languages, science, vocational shops and sex education.

Type of Project	Superintendent or Assistant Superintendent	Principal or Vice-Principal	District Staff	Teachers	Total	Percent of Total
Open society plan				2	2	1%
In-service training	1	1	1		3	2
Integration		3	1		4	2
Building design and planning	2	2	1	3	8	5
Title I			2	1	3	2
Title II		1			1	1
Title III	1		2		3	2
Totals	28	55	32	50	165	100%

TABLE 21

INFORMATION CONSIDERED INADEQUATE OR LACKING FOR PURPOSES OF PLANNING BY SUPERINTENDENTS AND ASSISTANT SUPERINTENDENTS

Information Considered Inadequate or Lacking in Evaluation	Frequency
The effect of new trends in Vocational Education on the comprehensive school model	1
Value of Educationally Handicapped classes -- percent of children returning to mainstream; long range study on adulthood success	1
Total evaluation of K-8 foreign languages, including especially time and cost	1
Techniques for objective measurement of the quality of education	1
Evaluation of outcomes of the Learning Assistance Program	1
Formal evaluation which proves the worth of the Continuous Program Plan (non-graded)	2
Effect of flexible scheduling as opposed to traditional programs	1
Statistically proven advantages of non-graded primary classes	2
The value of open shops or labs as compared to traditional approaches	1
Conflicting research reports on reading instruction	1
Studies to justify language labs instead of the tape recorder approach	1
Achievement results in other districts from reading labs	1
Conflicting literature on teacher loads and class size	1
Information Considered Inadequate in Instruction	
What to do with students not suited to flexible scheduling	1
Learning packages for flexible scheduling	1

	Frequency
The articulation of non-graded elementary schools with individualized instruction via departments in upper grades	1
Team Teaching--organizing compatible teams; optimum grouping; ideal facilities for large and small groups	1
Grouping at high school level, especially for college bound students	1
Training and human relations requirements for teachers assigned to "open area" instructional facilities	1
Why teachers resist or welcome language labs	1
Where we should be going in upgrading of Vocational Education	1
Family life information--programming materials, in-service education; community preparation and planning	1

Information Considered Inadequate or Lacking in Staff Problems

Experience with, and methods of financing video tape recorders for in-service training	1
How to involve staff so they will accept change	1
Role of full time counselors vs. part-time counselors	1
Salary schedules based on other factors than experience and training	1

Miscellaneous Information Considered Inadequate or Lacking

NDEA Title III funding and information at the beginning of this program	1
Criteria for selecting a research organization for the conduct of a master plan study	1
Current trends in building design	1
The effect of flexible scheduling on building plant needs	1
Definition of "agents of change"	1

INFORMATION CONSIDERED INADEQUATE OR LACKING FOR PURPOSES OF PLANNING BY DISTRICT STAFF

TABLE 22

Information Considered Inadequate or Lacking in Evaluation	Frequency
Value of Educationally Handicapped classes--percent of children returning to mainstream; long range study on adulthood success	1
Techniques for objective measurement of the quality of education	2
Community and student responses, involvement and success or achievement with Boundary Changes/de facto Segregation, Integration or Qualified Open Enrollment	1
Evaluative measures of Reading Readiness	2
Conflicting literature on teacher loads and class size	2
Information Considered Inadequate in Instruction	
Team Teaching--organizing compatible teams; optimum grouping; ideal facilities for large and small groups	1
Testing project materials and planning for New English Program	1
Junior High School Science Program--how to "sell" an elective to the students	1
Organizational information on specific courses such as Humanities, Minorities, Moral and Spiritual Values, American Communism. Course of study and how to discuss without prejudice	2
Sample schedules and efficiency of time vs. money for Speech Therapy Program	1
No reliable information for Sex Education	1
Family life information--programming materials, in-service education; community preparation and planning	1
Information Considered Inadequate or Lacking in Staff Problems	
How to involve staff so they will accept change	2
Quarter plan--implications, reaction and continuous progress plan for compulsory year round school year	2

	Frequency
Teacher/Administrator Evaluation Plan--what was evaluated--what are the professional duties	1
Miscellaneous Information Considered Inadequate or Lacking	
Research, design and time to evaluate Title I	2
Sources and Specifics to kinds of programs and common definition of terms in Title III	2

INFORMATION CONSIDERED INADEQUATE OR LACKING FOR PURPOSES OF PLANNING BY PRINCIPALS OR VICE-PRINCIPALS

TABLE 23

Information Considered Inadequate or Lacking in Evaluation	Frequency
Techniques for objective measurement of the quality of education	2
Evaluation of outcomes of the Learning Assistance Program	1
Parents and student reaction and effect on behavior and achievement in non-graded Junior High School elective courses	1
Evaluation (including drawbacks) of the New Math Program	3
The success of grouping of Intermediate School Pupils (cluster, ability, heterogeneous). Inadequate research to prove its worth	3
Community and student responses, involvement and success or achievement with Boundary/de facto Segregation, Integration or Qualified Open Enrollment	3
Effect of flexible scheduling as opposed to traditional programs	1
Conflicting research reports on reading instruction	3
Studies to justify language labs instead of tape recorder approach	1
Information Considered Inadequate in Instruction	
Learning packages for flexible scheduling	2
The articulation of non-graded elementary schools with individualized instruction via departments in upper grades	2
Tested project materials and planning for New English Program	1
Organizational information on specific courses such as Humanities, Minorities, Moral and Spiritual Values, American Communism. Course of study and how to discuss without prejudice	2
Science Program results, techniques, services and materials to back up the textbook	1

	Frequency
Varying plans of Grouping, i.e., pupil's intellectual/ emotional growth; physical maturity	4
Social Science Program; how to change from textbook centered curriculum, materials to fill the void	1
The effect of new trends in Vocational Education on the comprehensive school model	1
Family Life Information--programming materials, in-service education; community preparation and planning	1
Information Considered Inadequate or Lacking in Staff Problems	
How to involve staff so they will accept change	1
Patterns for best staffing of instructional programs	2
In-service training at district level	1
Curriculum planning alternatives, commercial materials, diagnostic skills, procedures and resource people	3
Staff responsibilities of programming and utilization of T.V.	1
Miscellaneous Information Considered Inadequate or Lacking	
Title II tools and guidance	1

INFORMATION CONSIDERED INADEQUATE OR LACKING FOR PURPOSES OF PLANNING BY TEACHERS

TABLE 24

Information Considered Inadequate or Lacking in Evaluation	Frequency
Evaluative measures of Reading Readiness	3
Comparative analysis of Linguistic Reading Approach for I.Q. 85-100 pupils	1
Varying plans of Grouping, i.e., pupil's intellectual/emotional growth, physical maturity	4
Information Considered Inadequate in Instruction	
Learning programs for flexible scheduling	1
The articulation of non-graded elementary schools with individualized instruction via departments in upper grades	1
Team Teaching--organizing compatible teams; optimum grouping; ideal facilities for large and small groups	4
Training and human relations requirements for teachers assigned to "open area" instructional functions .	1
Why teachers resist or welcome language labs	1
Tested project materials and planning for New English Program	1
No reliable information available for Sex Education	2
Science Program results, techniques, services and materials to back up the textbook	5
Social Science Program; how to change from textbook centered curriculum, materials to fill the void	2
Structured Phonics--instruction materials for introduction and progress to be expected. What about students not suited for it?	2
Scheduling, allowances, finanacing and volunteer assistance for Field Trips	1
Suppliers and costs of instructional machines for teaching aids	1

	Frequency
Where we should be going in upgrading of Vocational Education	1
Open Society Education reaction, communication, preparations and planning	2
Information Considered Inadequate or Lacking in Staff Problems	
Teacher/Administrator Evaluation Plan--what was evaluated, what are the professional duties	1
Curriculum planning alternatives, commercial materials, diagnostic skills, procedures and resource people	4
Miscellaneous Information Considered Inadequate or Lacking	
Research, design and time to evaluate Title I	1

SUMMARY OF INFORMATION CONSIDERED INADEQUATE OR LACKING FOR PURPOSES OF PLANNING BY ALL POSITIONS

TABLE 25

Information Considered Inadequate or Lacking in Evaluation	S.	D.S.	Pr.	T.	Total
The effect of new trends in Vocational Education on the comprehensive school model	1		1		2
Value of Educationally Handicapped classes--percent of children returning to mainstream; long range study on adulthood success	1	1			2
Total evaluation of K-8 foreign languages, including especially time and cost	1				1
Techniques for objective measurement of the quality of education	1	2	2		5
Evaluation of outcomes of the Learning Assistance Program	1		1		2
Formal evaluation which proves the worth of the Continuous Program Plan (non-graded)	2	3	2	5	12
Parents and students reaction and effect on behavior and achievement in non-graded Junior High School elective courses			1		1
Evaluation (including drawbacks) of the New Math Program			3		3
The success of grouping of Intermediate School Pupils (cluster, ability, heterogeneous). Inadequate research to prove its worth			3		3
Community and student responses, involvement and success or achievement with Boundary/de facto Segregation, Integration or Qualified Open Enrollment		1	3		4
Evaluative measures of Reading Readiness		2		3	5
Comparative analysis of Linguistic Reading Approach for I.Q. 85-100 pupils				1	1
Effect of flexible scheduling as opposed to traditional programs	1		1		2

	S.	D.S.	Pr.	T.	Total
Statistically proven advantages of non-graded primary classes	2	1	5	1	9
The value of open shops or labs as compared to traditional approaches	1				1
Conflicting research on reading instruction	1	1	3	1	6
Studies to justify language labs instead of the tape recorder approach	1		1		2
Achievement results in other districts from reading labs	1				1
Conflicting literature on teacher loads and class size	1	2			3
Varying plans of Grouping, i.e., pupils intellectual/emotional growth, physical maturity			4	4	8
Information Considered Inadequate in Instruction					
What to do with students not suited to flexible scheduling	1				1
Learning programs for flexible scheduling	1		2	1	4
The articulation of non-graded elementary schools with individualized instruction via departments in upper grades	1		2	1	4
Team teaching--organizing compatible teams; optimum grouping; ideal facilities for large and small groups	1	1		4	6
Grouping at high school level, especially for college bound students	1				1
Training and human relations requirements for teachers assigned to "open area" instructional facilities	1		1	1	3
Why teachers resist or welcome language labs	1			1	2
Tested project materials and planning for New English Program		1	1	1	3

	S.	D.S.	Pr.	T.	Total
Junior High School Science Program; how to "sell" an elective to the students		1			1
Organizational information on specific courses such as Humanities, Minorities, Moral and Spiritual Values, American Communism. Course of study and how to discuss without prejudice		2	2		4
Sample schedules and efficiency of time vs. money for Speech Therapy Program		1			1
No reliable information available for Sex Education		1		2	3
Science Program; results, techniques, services and materials to back up the textbook			1	5	6
Social Science Program; how to change from textbook centered curriculum, materials to fill the void			1	2	3
Structured Phonics; instructional materials for introduction and progress to be expected. What about students not suited for it?				2	2
Scheduling, allowances, financing and volunteer assistance for Field Trips				1	1
Supplies and costs of instructional machines for teaching aids				1	1
Where we should be going in upgrading of Vocational Education	1			1	2
Family Life information; programming materials, in-service education, community preparation and planning	1	1	1		3
Open Society Education; reaction, communication, preparations and planning				2	2
Information Considered Inadequate or Lacking in Staff Problems					
Experience with, and methods of financing video tape recorders for in-service training	1				1
How to involve staff so they will accept change	1	2	1		4

	S.	D.S.	Pr.	T.	Total
Role of full time counselors vs. part time counselors	1				1
Salary schedules based on other factors than experience and training	1	1	3	1	6
Quarter plan implications, reactions and continuous progress plan for compulsory year round school year		2			2
Teacher/Administrator Evaluation Plan--what was evaluated--what are the professional duties		1		1	2
Patterns for best staffing of instructional programs			2		2
In-service training at district level			1		1
Curriculum planning; alternatives, commerical materials, diagnostic skills, procedures and resource people			3	4	7
Staff responsibilities of programming and utilization of T.V.			1		1
Miscellaneous Information Considered Inadequate or Lacking					
NDEA Title III funding and information at the beginning of this program	1				1
Criteria for selecting a research organization for the conduct of a master plan study	1				1
Current trends in building design	1	1	2	3	7
The effect of flexible scheduling on building plant needs	1				1
Definition of "agents of change"	1				1
Research, design and time to evaluate Title I		2		1	3
Title II Proposal; tools and guidance			1		1
Sources and specifics to kinds of programs and common definition of terms in Title III		2			2

The Rating of Educational Decisions with Respect to Their "Importance"

The importance of various kinds of educational decisions was assessed in this question. Respondents were asked to indicate levels of importance of 40 different types of decisions on a three-point scale: (1) minimally important, (2) moderately important, (3) highly important. Means for each item were computed using the arbitrary weights indicated. The range of means was from 1.41 to 2.88 (Table 26), thus covering a substantial part of the scale. Multiple regression analysis indicated no grounds for considering that significant contributions to variance were made by any of the sets of categories or all of them in combination. The means stated are, therefore, for all respondents on Form A considered together.

The following decisions were regarded as most important in descending order: (1) decisions to hire new teaching personnel; (2) decisions to terminate teaching personnel; (3) decisions to install new curricular innovations; (4) decisions to recommend new curricula to higher echelons; (5) decisions to alter student-teacher ratios. Two quite different areas appear to be involved in these items. Three of them have to do with teaching personnel; the other two with curricular innovation. Obviously, both of the areas are at the heart of the educational process.

Decisions regarded as least important included: (1) decisions to change emphasis in intramural sports; (2) decisions to change emphasis in varsity sports; (3) decisions to allow universities to conduct a testing project; (4) decisions to purchase basic school equipment. None of these are seen as central to educational effectiveness apparently.

DEGREE OF IMPORTANCE OF VARIOUS EDUCATIONAL DECISIONS

TABLE 26

	Minimally Important (1)	Moderately Important (2)	Highly Important (3)
Decisions to hire new teaching personnel			2.88
Decisions to terminate teaching personnel			2.84
Decisions to install new curriculum or innovations			2.82
Decisions to recommend new curriculums to higher echelons (school board, department heads, superintendent)			2.73
Decisions to alter student/teacher ratios			2.62
Decisions to expand utilization of the discovery process as a means of instruction in most grade levels			2.60
Decisions to alter teacher salaries			2.53
Decisions to conduct studies of teaching effectiveness			2.53
Decisions to adopt non-graded instruction		2.48	
Decisions to provide for student participation in definition of learning experiences		2.46	
Decisions to develop a new method of interface with parents and the community with respect to educational problems		2.45	
Decisions to replace rote learning and memorization with "open book" approaches somewhat reminiscent of "in the world" work experiences		2.43	
Decisions to change the emphasis in grading procedures		2.42	
Decisions to modify school budget		2.40	
Decisions to adopt flexible scheduling		2.40	

	Minimally Important (1)	Moderately Important (2)	Highly Important (3)
Decisions to conduct evaluational studies of student achievement		2.38	
Decisions to modify staff services (psychological, health, counseling, etc.)		2.38	
Decisions to purchase new text-books		2.37	
Decisions to alter administrative or staff salaries		2.36	
Decisions to emphasize creative utilization of either rote or otherwise learned material		2.36	
Decisions to adopt team teaching		2.35	
Decisions to demote or hold back students		2.34	
Decisions to change teacher in-service training		2.30	
Decisions to expand or modify the educational plant		2.29	
Decisions to expel or suspend students		2.26	
Decisions to group students homogeneously		2.26	
Decisions to transfer teachers to other schools		2.25	
Decisions to change school procedures or instruction due to new county, state or federal requirements		2.25	
Decisions to visit other systems to get new ideas		2.24	
Decisions to increase supervisory duties (non-teaching) of faculty staff		2.20	
Decisions to change sequence of instruction within established curriculum areas		2.15	

	Minimally Important (1) Moderately Important (2) Highly Important (3)
Decisions to purchase new instructional equipment (tape recorders, teaching machines, projectors, etc.)	2.13
Decisions to participate in Title III or Title IV projects	2.06
Decisions to increase community participation of teaching staff	2.02
Decisions to bring in outside educational consultants	1.97
Decisions to provide for more supervised study during the school day	1.87
Decisions to purchase basic school equipment (desks, chairs, plumbing, etc.)	1.68
Decisions to allow universities to conduct a testing project	1.62
Decisions to change emphasis in varsity sports programs	1.46
Decisions to change emphasis in intramural sports programs	1.41

"Stumbling Blocks" to Effective Educational Decision-Making Rated According to Their Perceived Severity

Since there may be many impedances to effective educational decision-making, a question was formulated in which 18 "stumbling blocks" to the decision process were presented. Respondents were asked to indicate the severity of each one on a four-point scale. The "stumbling blocks" covered a wide range of conceivable impedences such as "need to satisfy diverse groups," "failure to get information on time," and the like. The weighing of responses was as follows: (1) not a "stumbling block;" (2) a small "stumbling block;" (3) a moderately strong "stumbling block;" (4) a great "stumbling block."

From the multiple regression analysis it was ascertained that not more than 3% of the variance in responses was accounted for by the four classification categories which formed the basis for respondent selection. Therefore, individual scores were combined independent of position differences and a mean score for all respondents was determined for each "stumbling block" item. Mean scores are shown in descending order opposite the item upon which they were obtained in Table 27.

In Table 27 it may be seen that none of the "stumbling blocks" were rated at the extremes of the possible range which ran from 4 to 1. The mean scores for the combined sample runs from 3.21 to 2.10. With very few exceptions, the mean scores show the "stumbling blocks" to be rated between being "small" and "moderately strong."

The following five items rank the highest with respect to being "stumbling blocks" to effective decision-making and are presented in descending order: (1) lack of sufficient time to study problems; (2) too much focus on financial aspects of decision-making; (3) need to satisfy many diverse groups; (4) lack of qualified skills to provide research support; and (5) failure to define goals in "operational" or measurable terms.

On the opposite end of the spectrum, the following items are perceived as providing a minimum of impedances to decision-making. These are presented in reverse or ascending order, or beginning with the least interfering factor in the decision process: (1) overwhelming pressure from non-educational sources; (2) change in the nature of the problem while deicisions are being made; (3) trying to relate results and programs elsewhere to the local problem; (4) inability to identify causal factors underlying educational problems; and (5) study of the wrong variables upon which decisions are based.

It is of interest to note that those "stumbling blocks" which score relatively high are concerned with the need for more research skills at district level. The need to define educational goals in measurable terms also receives a relatively high score, and this finding may provide an additional reflection of shortages of research personnel whose training has emphasized the need for "operational definitions." Finding that excessive focus on financial aspects of decision-making also scores relatively high does not come as a surprise since there is so much emphasis currently upon the justification of spending on a cost/benefit basis. It is not surprising, also to find that the need to satisfy many diverse groups appears near the top of the list since education consistently has been confronted by such pressures.

DEGREE TO WHICH SEVERAL FACTORS ARE SEEN AS "STUMBLING BLOCKS" TO EFFECTIVE EDUCATIONAL DECISION-MAKING

TABLE 27

	Does Not Provide A "Stumbling Block" (1)	A Small "Stumbling Block" (2)	A Moderately Strong "Stumbling Block" (3)	A Great "Stumbling Block" (4)
Lack of sufficient time to study the problem			3.21	
Too much focus upon the financial aspects of decision-making			3.08	
Need to satisfy many diverse groups			2.93	
Lack of qualified skills for providing research support for decision-making			2.87	
Failure to define goals or objectives in measurable or "operational" terms			2.81	
Lack of organizational structures to translate research results into meaningful terms for the decision-maker			2.76	
Difficulty in defining exactly what the problem is			2.62	
Failure to explore alternative solutions			2.60	
Inability to clarify educational issues or projects in the eyes of the community			2.54	
Failure to get pertinent information to the decision-maker on time			2.53	
Inability to determine where the same problem is being resolved elsewhere		2.48		

	Does Not Provide A "Stumbling Block" (1)	A Small "Stumbling Block" (2)	A Moderately Strong "Stumbling Block" (3)	A Great "Stumbling Block" (4)
Lack of training in decision-making skills		2.44		
Inability to integrate committee action with ultimate decision-making		2.43		
Study of the wrong variables upon which decisions are based		2.35		
Inability to identify causal factors underlying educational problems		2.35		
Trying to relate results and programs elsewhere to the local problem		2.34		
Change in the nature of problem while decisions are being made		2.21		
Overwhelming pressure from non-educational sources		2.10		

Informational Requirements for Six Educational Planning Areas Rated According to "Importance" and Difficulty to Obtain

A series of items concerned with educational planning were included in both forms of the questionnaire. Six planning areas were specified. Under each area, various types of information bearing on decisions in that planning area were listed. On Form A, respondents were asked to indicate the level of importance of each type of information in making decisions in the specified planning area. For Form B, the planning areas and types of information were identical, but the respondents were asked to rate the difficulty of obtaining the information. In both cases three point scales were used and arbitrary values assigned to responses for statistical analysis. The Form A categories and weights were as follows: (1) minimally important; (2) moderately important; (3) highly important. Categories and weights on Form B were: (1) not difficult to obtain; (2) moderately difficult to obtain; (3) very difficult to obtain.

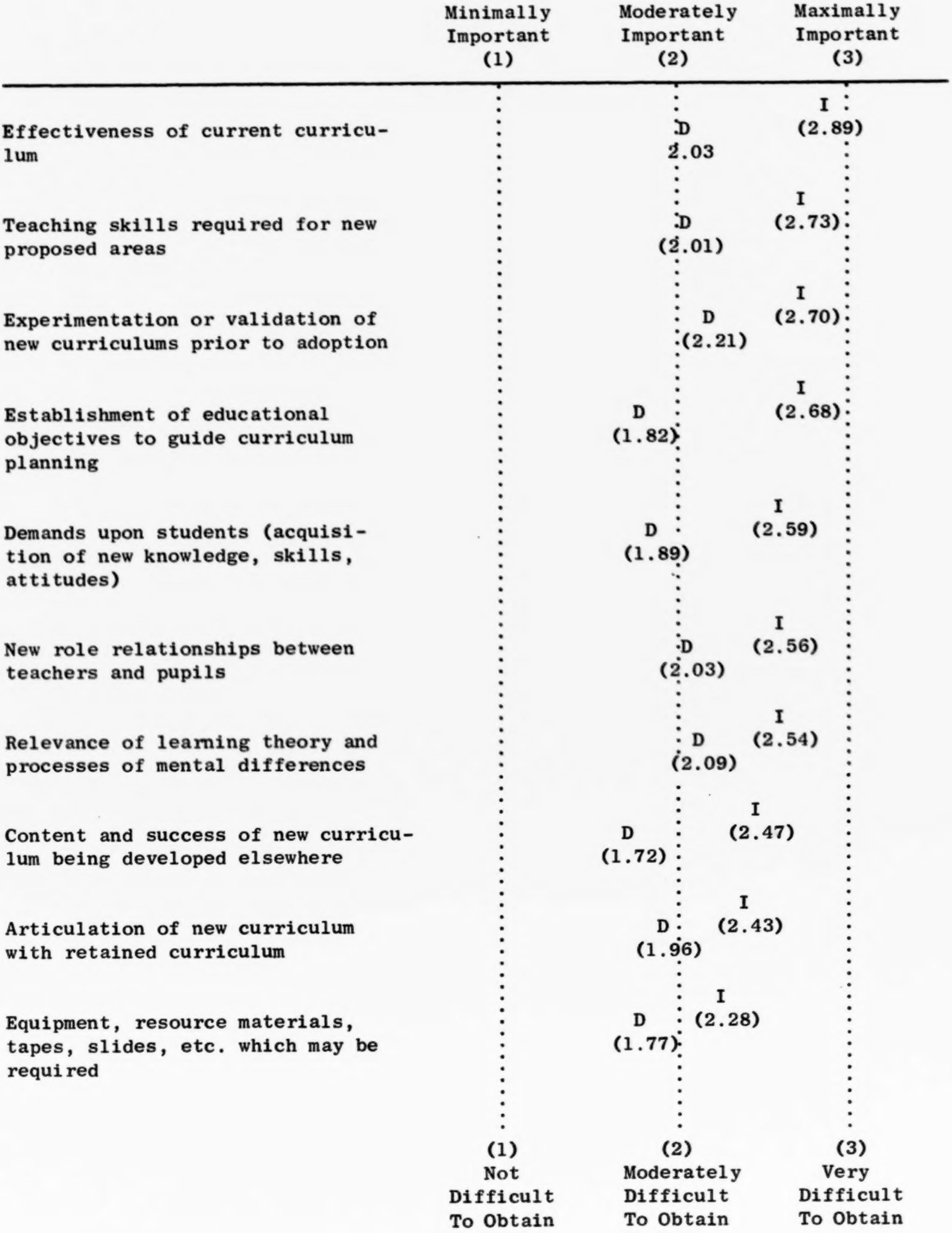
In order to make interpretation easier, the mean values for both importance and difficulty are indicated in the accompanying tables. Thus for each item under each planning area, two means are presented. No more than 9% of the variance was accounted for by all classification categories combined in the multiple regression analysis on any of the twelve items here to be discussed. Therefore, in all cases the data were combined, without respect to categorical breakouts, in the discussion.

Curriculum Planning and Development

In this planning area (Table 28) all items fell in a narrow range between the moderately important and highly important classifications.

IMPORTANCE OF, AND DEGREE OF DIFFICULTY IN OBTAINING INFORMATION RELEVANT TO CURRICULUM PLANNING AND DEVELOPMENT

TABLE 28



The three highest in descending order were: (1) information relating to effectiveness of current curriculum; (2) teaching skills required for new proposed areas; and (3) experimentation or validation of new curriculums prior to adoption.

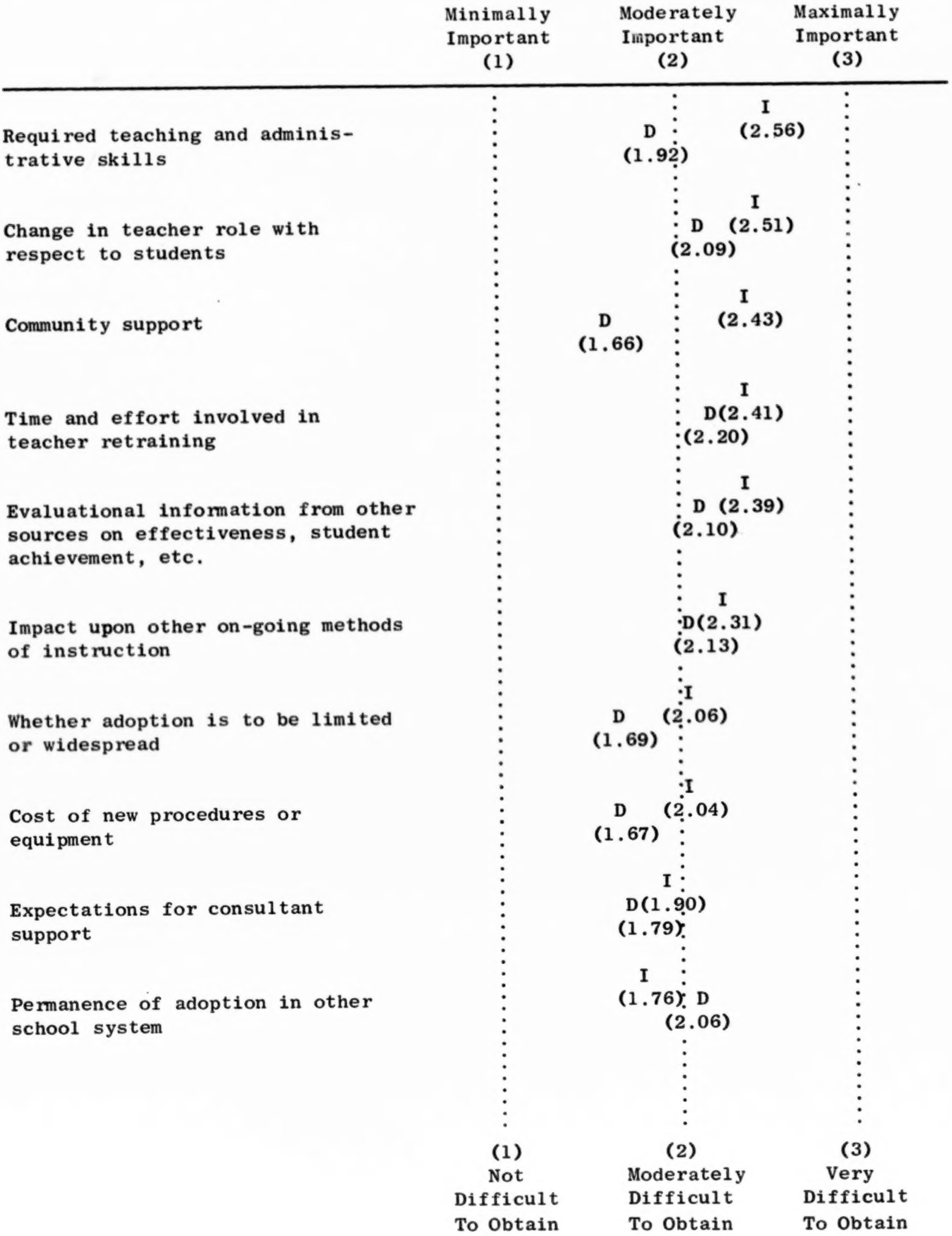
On the difficulty of information acquisition scale (Form B) the range was also narrow with all items falling close to the moderately difficult to obtain classification (Table 28). Slightly higher, in descending order, were: (1) experimentation or validation of new curriculums prior to adoption; (2) relevance of learning theory and processes of mental development; and (3) effectiveness of current curriculum.

Two items, as may be noted, appear in high positions on both of the scales. This suggests that they may be particularly significant problems in the curriculum planning and development area, since information about them is both important and difficult to obtain. They are "effectiveness of current curriculum" and "experimentation or validation of new curriculums prior to adoption."

Adopting New Methods of Instruction or New Instructional Equipment

The range of means for information items in this area on the importance dimension is 1.76 to 2.56 (Table 29). Most items fall between moderately and highly important. Slightly higher, in descending order, is information regarding: (1) required teaching and administrative skills; (2) change in teacher role with respect to students; and (3) community support.

On the difficulty dimension, the range of means is from 1.66 to 2.20. Table 29 indicates that information in most of the areas is moderately difficult to obtain. On the higher difficulty side, in descending order, IMPORTANCE OF, AND DIFFICULTY IN OBTAINING INFORMATION RELEVANT TO ADOPTING NEW METHODS OF INSTRUCTION OR NEW INSTRUCTIONAL EQUIPMENT TABLE 29



is information regarding: (1) time and effort involved in teacher retraining; (2) impact upon other on-going methods of instruction; and (3) evaluative information from other sources on effectiveness, student achievement, etc.

There is no duplication of items among the highest ones on the two dimensions of importance and difficulty in obtaining information. However, the item "change in teacher role with respect to students" which is number 2 on the importance list is number four on the difficulty list. This information item may, therefore, be regarded as a somewhat more critical problem, since it is relatively high on both the importance and difficulty scales.

Evaluating the Educational Programs

In the area of evaluating educational programs, information items range between 2.02 and 2.66 on the importance scale (Table 30). Thus, all are regarded as moderately to highly important. The highest, in descending order, is information about: (1) identifying objectives and goals of the program in measurable terms; (2) what methods should be used for evaluating each component selected; and (3) what components of the program should be evaluated.

On the difficulty of obtaining information scale, the range of mean values is from 1.67 to 2.30, with all falling in the general area of moderate difficulty (Table 30). On the high side, in descending order of difficulty are: (1) identifying objectives and goals of the program in measurable terms; (2) what methods should be used for evaluating each component selected; and (3) the availability of requisite skills for evaluation.

IMPORTANCE OF, AND DIFFICULTY IN OBTAINING INFORMATION RELEVANT TO EVALUATING EDUCATIONAL PROGRAMS

TABLE 30

Minimally Important (1) — Moderately Important (2) — Maximally Important (3)

	I	D
Identifying objectives and goals of the program in measurable terms	(2.66)	(2.30)
What methods should be used for evaluating each component selected	(2.65)	(2.22)
What components of the program should be evaluated	(2.63)	(1.93)
Area of student response to be evaluated (achievement, attitude change, social interaction, etc.)	(2.53)	(1.92)
What skills will be necessary for evaluational studies	(2.43)	(2.18)
The availability of requisite skills for evaluation	(2.42)	(2.18)
Community resistance to evaluation (test results, etc.)	(2.03)	(1.67)
How frequently respective educational components should be evaluated	(2.02)	(1.91)

(1) Not Difficult To Obtain — (2) Moderately Difficult To Obtain — (3) Very Difficult To Obtain

The items having to do with identifying objectives and goals in measurable terms and component evaluation methods are in the highest positions on both importance of information and difficulty of obtaining information scales. Thus, they may be regarded as particularly critical problems.

Planning Proposed New Buildings and Additions

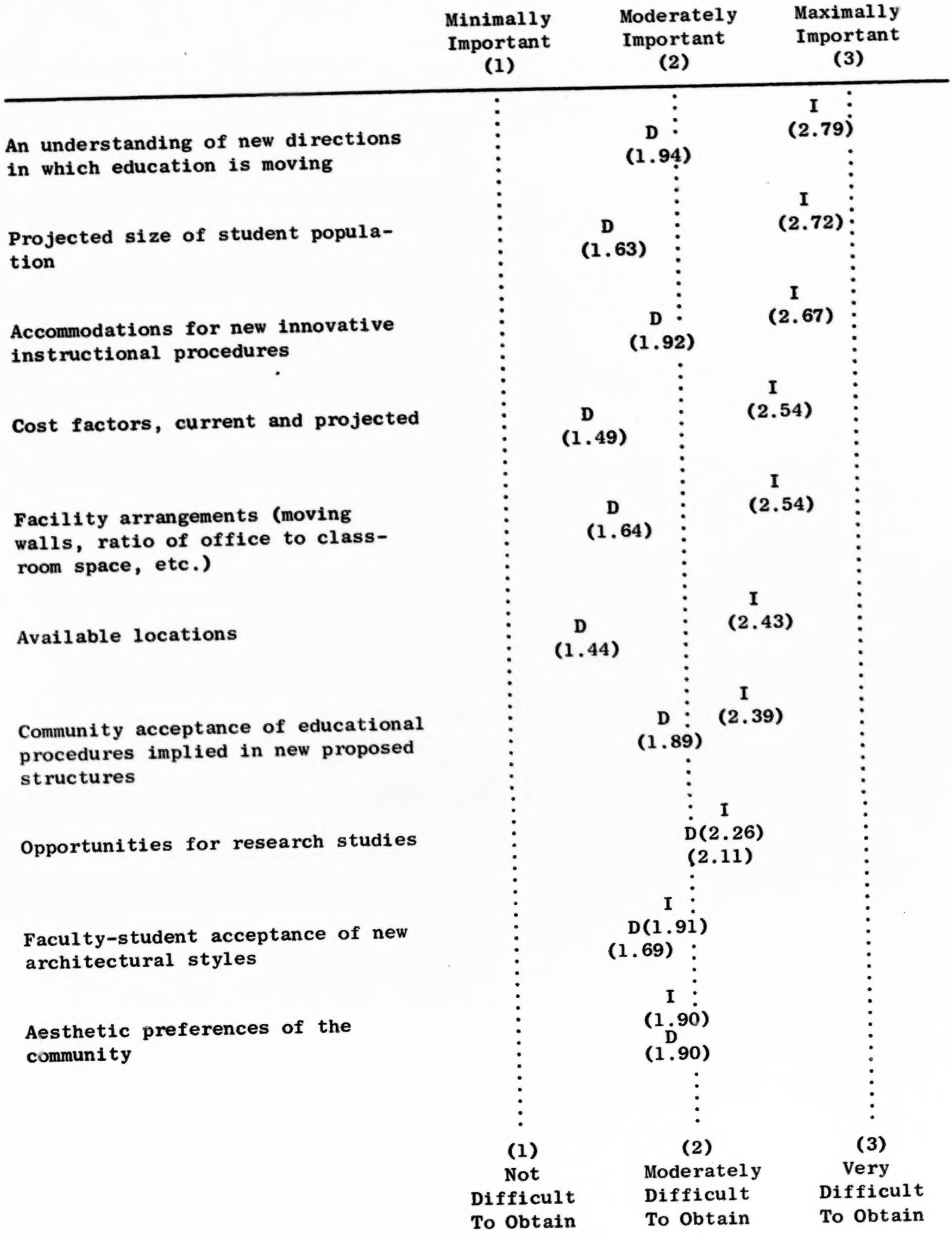
In the area of planning new buildings and additions, the range of means of the importance dimension is from 1.90 to 2.79 (Table 31) or from moderately important to highly important. Information relative to the following three items, in descending order, was found to be higher on the scale than that concerning the other items: (1) an understanding of new directions in which education is moving; (2) projected size of student population; (3) accomodations for new innovative instructional procedures.

On the dimension of difficulty in obtaining information, the range of means was narrow and in the moderately difficult area, running from 1.44 to 2.11 (Table 31). Items on which information was thought to be more difficult to obtain, in descending order of difficulty, included: (1) opportunities for research studies; (2) an understanding of new directions in which education is moving; and (3) accomodations for new innovative instructional procedures.

Two of the items, "an understanding of new directions in which education is moving " and "accomodations for new innovative instructional procedures," are high on both lists, and therefore, may represent more fundamental problems.

TABLE 31

IMPORTANCE OF, AND DIFFICULTY IN OBTAINING INFORMATION RELEVANT TO PLANNING NEW BUILDINGS AND ADDITIONS



Appraising Teacher or Administrator Effectiveness

Responses on the teacher or administrator effectiveness appraisal area show a mean range of 1.99 to 2.82 on the importance of information dimension (Table 32). Highest items, in descending order, are: (1) criteria for an effective appraisal system; (2) faculty and staff reactions to appraisal programs, and (3) how educational workloads affect performance. The lowest item rating on "effective evaluation systems in operation elsewhere " may reflect a feeling that in the sensitive area of performance appraisal what has happened elsewhere is of lesser relevance because of differences in local conditions.

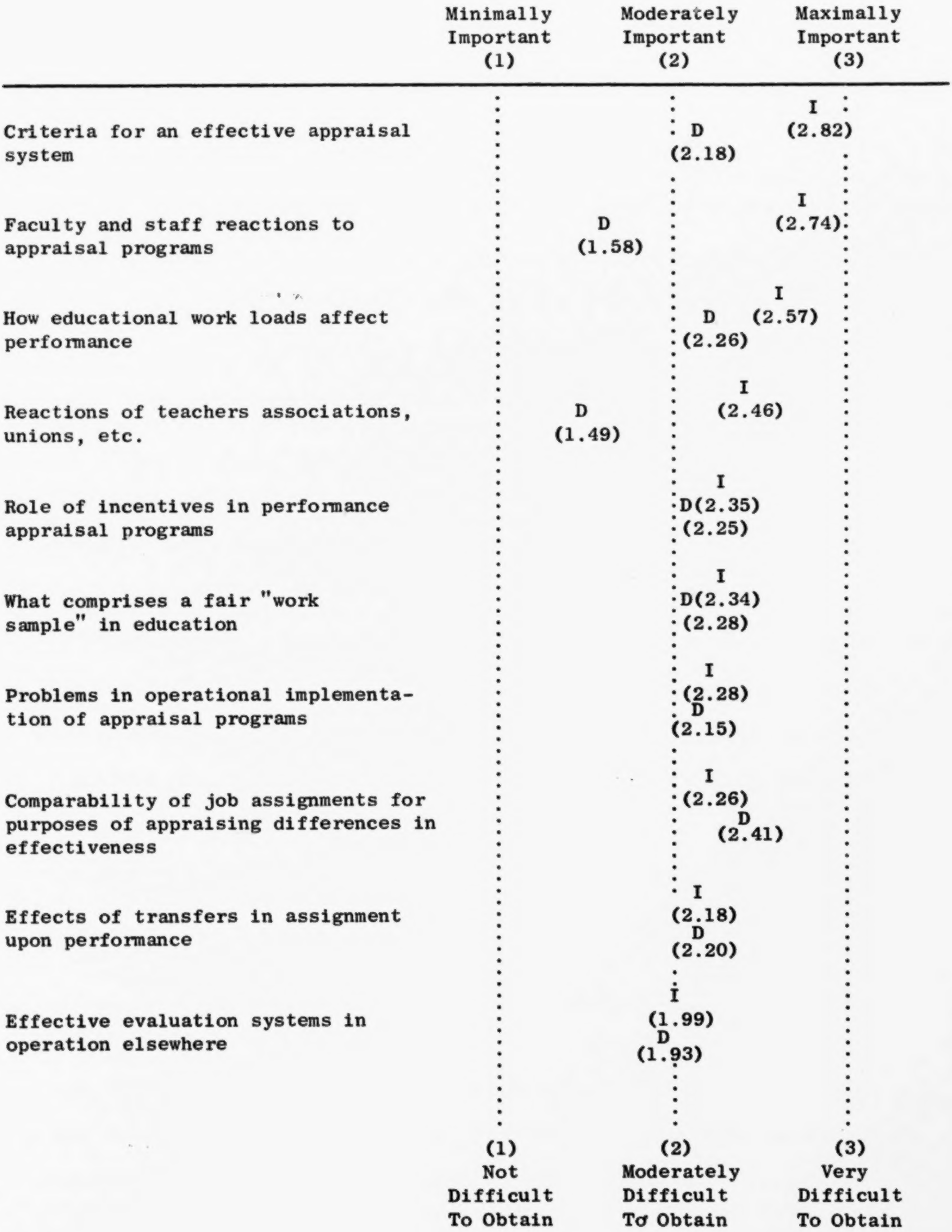
On the dimension of difficulty in obtaining information (Table 32) the range of means is from 1.49 to 2.41, with most items falling near the moderately difficult to obtain position. Slightly higher, in descending order, are the following: (1) comparability of job assignments for purposes of appraising differences in effectiveness; (2) what comprises a fair work sample in education; and (3) how educational workloads affect performance. Faculty, staff, teacher association and union reactions to appraisal programs are evidently considerably less difficult to obtain than the other information items, as indicated by their low rating. "How educational workloads affect work performance" appears high on both lists, so it may be regarded as a more salient problem area.

Grouping, Promotion and Grading Practices

All items on the importance dimension in the area of information regarding grouping, promotion and grade reporting practices are in the moderately important to highly important range, the values running from 2.14 to 2.82 (Table 33). In descending order, the higher items include:

IMPORTANCE OF, AND DIFFICULTY IN OBTAINING INFORMATION RELEVANT TO TEACHER OR ADMINISTRATOR EFFECTIVENESS

TABLE 32



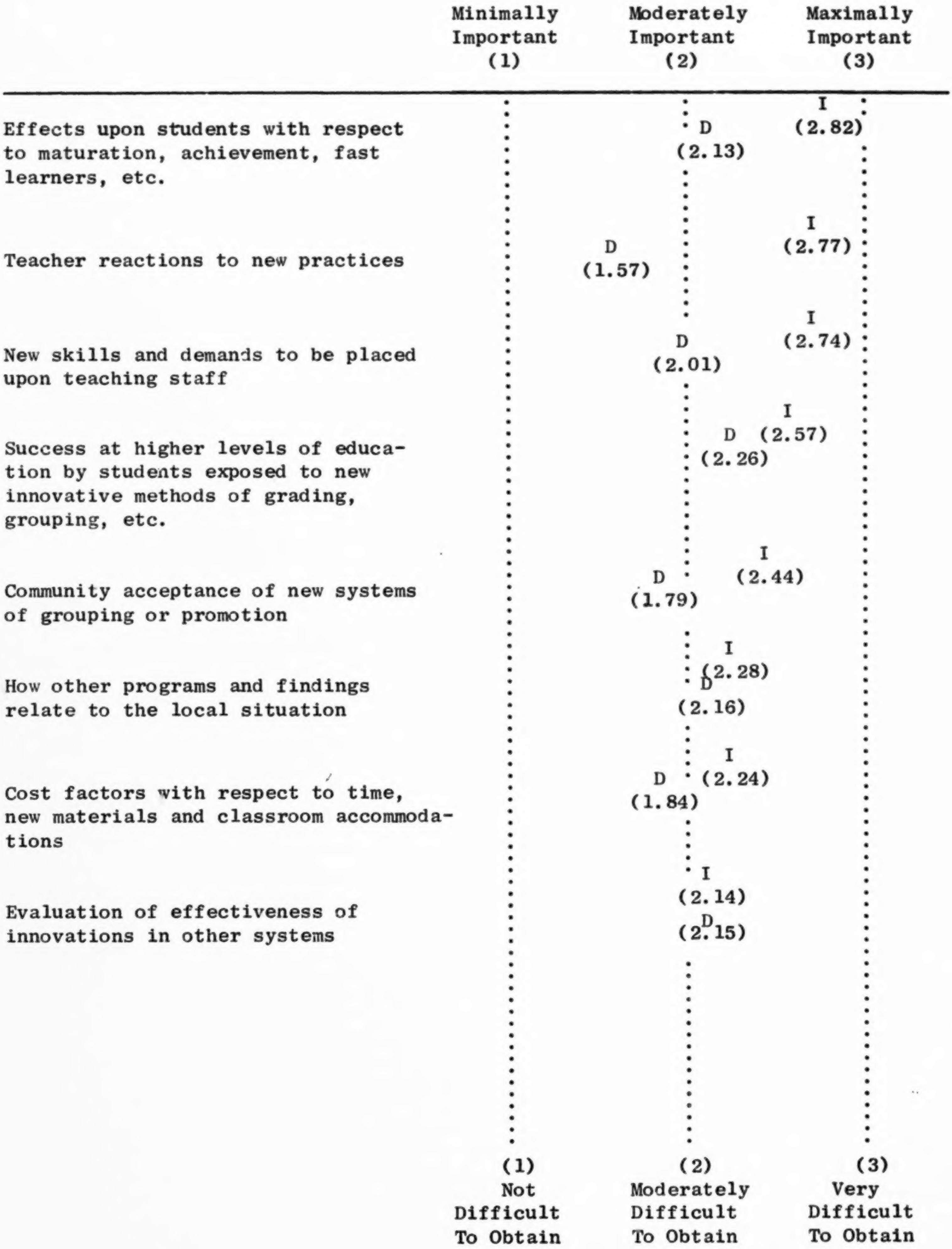
(1) effects upon students with respect to maturation, achievement, fast learners, etc.; (2) teacher reactions to new practices; and (3) new skills and demands to be placed upon teaching staff. Two of the lower items relate to other systems, which suggests again that those factors thought to be primary tend to be concerned with the local situation.

On the dimension of difficulty in obtaining information, the range of means is from 1.57 to 2.26, with most items falling near the moderately difficult to obtain point (Table 33). The higher items, in descending order, include: (1) success at high levels of education by students exposed to new innovative methods of grading, grouping, etc.; (2) how other programs and findings relate to the local situation; and (3) evaluation of effectiveness of innovations in other systems.

There is no overlap among the high items of the two dimensions of importance and difficulty of obtaining information in this case. Contrariwise, two of the items rated highest on the difficulty dimension (evaluation of effectiveness of innovations in other systems and how other programs and findings relate to the local situation) are rated lowest on the importance dimension. Thus, the difficulty of obtaining information in these instances is not a major problem, since it is seen as relatively unimportant.

TABLE 33

IMPORTANCE OF, AND DIFFICULTY IN OBTAINING INFORMATION RELEVANT TO GROUPING PROMOTION AND GRADING PRACTICES



Sources of Innovation and Change, Internal, and External to School Districts

As a means of determining the channels of change, the respondents in this study were asked the following questions: What innovations have you seen adopted in your school district? With whom and from what source did the idea originate?

Internal Sources of Innovation in School Districts

Sixteen innovations (new math, team teaching, computer-aided instruction, etc.) were presented and respondents were asked to indicate the primary source internal to their district which was responsible for introducing the innovation and then to indicate the primary source external to the district from which each innovation was drawn.

Table 34 indicates the results for internal sources of innovation and change. The internal sources are shown and the rankings accorded them by each sub-group are also shown. These rankings were computed in terms of the frequency with which each sub-group tended to choose a particular source and then awarding Rank 1 to the source which was chosen most frequently, and so on. As an example, Superintendents chose Principals or Vice-Principals most frequently as internal sources of innovation followed by Teachers. Therefore, Principals and Vice-Principals were given Rank 1 whereas Teachers were given Rank 2.

Both Principals and Teachers tend to perceive themselves as the internal sources in their school districts which were primarily responsible for introducing these sixteen innovations which were presented. Superintendents tend to agree with the latter groups for they award Rank 1 to Principals and Rank 2 to Teachers. Interestingly enough, Superintendents tend to choose themselves next to last (Rank 6) as the primary agents of innovation. However, they must be in the loop which approves the innovation even though this role did not come out in the study.

District staff personnel, however, do not have the same perception since they give their highest rankings to their own staff levels (Rank 2) and to Assistant Superintendents for Instruction (Rank 1). When the entire sample is combined, Table 34 indicates that Teachers and Principals are tied and rank first (a rank of 1.5 indicates the two groups are tied). Rank 3 is awarded to District Staff specialists, with Superintendents and Assistant Superintendents following. School Boards and Research Offices at school level are tied for last place and receive the Rank 7.5. Finding that School Boards score low as innovative sources is not surprising for this is not specifically their role. The low ranking of research offices at school district level may reflect the fact that they are uncommon and where they do exist, they perform a relatively new function, so they have yet to have much impact upon change.

If we discount these differences in rankings at the upper end by the four groups and take into account all levels of ranking, a fair degree of agreement is found. This is expressed by the $\bar{W}$ (Kendall coefficient of concordance) value = .738 which is an expression of agreement among rankings for the four sub-groups. The $\bar{W}$ value runs from 0 to 1 and the .738 value for the $\bar{W}$ coefficient was found to be statistically significant.

Sources External to a School District from which Innovations are Drawn

Teachers and Principals are perceived as the leading (holding 1st and 2nd Rank) introducers of innovation within the school districts which

TABLE 34

RANKINGS OF PRIMARY SOURCES INTERNAL TO SCHOOL DISTRICTS WHICH ARE RESPONSIBLE FOR INNOVATION

Source / Position	School board	School district superintendent	Assistant Superintendent/Director/Coordinator/for Instruction	Assistant Superintendent/Director/Coordinator/for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
(N = 48) Superintendents	7	5	4	6	3	1	8	2
(N = 64) District Staff	8	6	1	3	2	5	7	4
(N = 134) Principal	8	5	3	6	4	1	7	2
(N = 142) Teachers	7	3	6	5	4	2	8	1
(N = 388) Totals	30	19	14	20	13	9	30	9
Ranks for total sample	7.5	5	4	6	3	1.5	7.5	1.5

$\overline{W} = 0.728$*

*(Kendall coefficient of concordance)

$X^2 = 20.67$ (with 7 d.f. it is significant at the .01 level of confidence)

X^2 test conducted to establish that the $\overline{W}$ value is significantly different from zero were studied. Sources external to school districts were examined in another part of the question. Two additional options also were included, i.e., a "don't know" category and "arose purely within district."

Table 35 presents the rankings which each sub-group gave to the external sources (county school offices, Title III and Title IV Centers, Universities, etc.) and also the results in rankings when the sub-groups were combined into a single sample.

The first result to be noted is that either Rank 1 or Rank 2 is awarded by all sub-groups to the "don't know" category, indicating that they do not seem to be aware precisely of where the ideas were obtained. As a check upon this finding, the raw data on the sub-group responses were examined (see Tables A-23 through A-26, Appendix A). It was found that 26% of the combined sample answered in this direction. The next highest rank (Rank 2) is awarded "programs in other school systems," with the raw data indicating 18%. This provides an idea of the order of magnitude of percentage of responses which underlie Ranks 1 and 2.

Table 35 indicates a marked consistency among the four sub-groups on the rankings awarded each of the external sources from which ideas are obtained. The Kendall coefficient of concordance is very high (.932), indicating greater agreement among the four educational groups than the .732 index of agreement on internal-to-school-district sources of innovation.

The finding that "other school systems" receives the highest rank (Rank 2) among the recognized sources seems to be in accord with findings presented earlier in Section VIII which indicated that communication with other school systems occurred with relatively high frequency.

RANKINGS OF PRIMARY SOURCES EXTERNAL TO SCHOOL DISTRICTS FROM WHICH IDEAS ARE DRAWN

TABLE 35

Source / Position	County office of education	State Department of Education	Title III or PACE Center and Title IV Regional Centers	University education R&D Centers	University courses or University professors	Programs in other school districts	Symposia, professional meetings, workshops	None--idea arose purely within district	Don't know--source external to district is unknown
(N = 48) Superintendents	7	5	9	8	6	1	3	4	2
(N = 64) District Staff	7	4	8.5	8.5	6	2	3	5	1
(N = 134) Principals	6	5	9	8	7	1	3	4	2
(N = 142) Teachers	7	2	8	9	6	3	5	4	1
(N = 388) Totals	27	16	34.5	33.5	25	7	14	17	6
Ranks for total sample	7	4	9	8	6	2	3	5	1

$\overline{W} = 0.932$*

*(Kendall coefficient of concordance)

$X^2 = 29.82$ (with 8 d.f. it is significant at the .01 level of confidence)

X^2 test conducted to establish that $\overline{W}$ value is significantly different from zero

It is not surprising that University R&D Centers (Rank 8) do not provide a direct pipeline to school districts since their products usually flow to U.S. Office of Education, Regional Laboratories, and the like. Title III Centers and Title IV Centers (Regional Laboratories) (Rank 9) are relatively new on the educational scene and it is unlikely that their products had reached full-scale development, at the time of this survey to the point where they could be adopted at the operational school level.

APPENDIX A

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TABLE A-1

FREQUENCY OF UTILIZATION OF INFORMATION SOURCES FOR EDUCATIONAL DECISION-MAKING

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According To Mean Value		(1) Have Never Used This Source	(2) With Little Frequency	(3) With Moderate Frequency	(4) With High Frequency	Mean	Standard Deviation	Number of Responses
1	Colleagues in same school systems	0%	8%	42%	50%	3.42	.63	179
2	Principals and vice-principals	1	16	31	51	3.33	.78	175
3	Professional meetings (annual, semi-annual, etc.)	3	24	47	26	2.96	.78	181
4	Curriculum specialists	8	28	34	30	2.85	.95	181
5	School district superintendents, asst-superintendents (direct contact)	14	22	31	33	2.82	1.05	180
6	Directors of Instruction	21	19	31	28	2.66	1.10	175
7	Local professional educational libraries	15	29	42	14	2.54	.91	180
8	County Offices of Education	12	38	41	9	2.47	.82	180
9	Educational consultants (inside school system)	19	33	32	16	2.45	.98	180
10	Colleagues in other school systems	9	47	38	6	2.40	.74	179
11	Publishers of educational texts	20	37	36	7	2.30	.86	181

Rank Order According To Mean Value		(1) Have Never Used This Source	(2) With Little Frequency	(3) With Moderate Frequency	(4) With High Frequency	Mean	Standard Deviation	Number of Responses
12	Teachers associations or unions	18%	47%	28%	7%	2.25	.83	180
13	Local citizens and community groups	19	47	30	4	2.20	.79	179
14	School Boards	29	36	25	10	2.16	.96	179
15	Academic department heads	40	23	22	16	2.13	1.11	167
16	University libraries	25	43	25	7	2.13	.87	178
17	University professors	19	54	25	2	2.10	.71	178
18	State Department of Education	22	49	27	2	2.09	.75	181
19	Local public libraries	26	47	22	5	2.07	.82	180
20	Educational consultants (from outside of school system)	24	58	18	1	1.95	.66	180
21	Research office at school level	59	19	16	6	1.69	.94	176
22	Federal education programs (MDTA, Job Corps, etc.)	66	26	8	1	1.43	.66	180
23	Title III Centers (PACE)	65	30	4	0	1.39	.57	179
24	University R&D Centers	71	23	5	1	1.35	.61	175
25	Industrial training programs	76	20	4	1	1.29	.57	180
26	Title IV Centers	87	10	2	0	1.15	.42	172

TABLE A-2

FREQUENCY OF UTILIZATION OF MODES OF COMMUNICATION IN EDUCATIONAL DECISION-MAKING

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According To Mean Value	(1) Have Never Used This Source	(2) With Little Frequency	(3) With Moderate Frequency	(4) With High Frequency	Mean	Standard Deviation	Number of Responses
1 Discussions (formal or informal) with colleagues in same school system	0%	3%	30%	67%	3.63	.57	207
2 Curriculum materials from school programs developed elsewhere	1	21	52	25	3.01	.73	205
3 M.A. theses or doctoral dissertations	1	23	53	23	2.99	.71	206
4 Personal communication with educators in other school systems	3	27	39	31	2.98	.85	206
5 Publisher's materials (guides, lesson plans, student handbooks, etc.)	2	29	45	24	2.90	.78	206
6 Articles in general educational journals	2	28	51	19	2.86	.74	207
7 Proceedings of professional meetings or symposia	3	29	48	20	2.85	.77	206
8 Articles in educational research journals	3	31	47	19	2.83	.77	206
9 Educational newsletters	6	37	46	11	2.62	.77	207

Rank Order According To Mean Value		(1) Have Never Used This Source	(2) With Little Frequency	(3) With Moderate Frequency	(4) With High Frequency	Mean	Standard Deviation	Number of Responses
10	Research studies or other analytical studies conducted within the school system	15%	33%	40%	12%	2.49	.89	207
11	Lecture notes, seminar reports from university courses	10	47	33	9	2.42	.80	206
12	Formal written reports from other school systems	14	44	38	4	2.31	.76	207
13	Educational yearbooks	28	46	22	4	2.02	.82	204
14	Reports from Title III and Title IV Centers	50	31	17	2	1.70	.80	199
15	Professional educational textbooks	44	49	7	0	1.64	.63	203
16	ERIC documentation (hard copy or microfiche)	75	18	7	0	1.31	.59	199

DEGREE OF DIFFICULTY IN THE UTILIZATION OF INFORMATION SOURCES

TABLE A-3

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According To Mean Value	(1) Have Had No Difficulty	(2) Have Had Little Difficulty	(3) Have Had Some Difficulty	(4) Have Had Great Difficulty	Mean	Standard Deviation	Number of Responses
1 Deciding whether the statistical results of a research study are sufficiently strong to warrant adoption of the findings	6%	20%	45%	29%	2.97	.85	170
2 Understanding the procedures for getting information from ERIC, DATRIX, State information systems, etc.	12	19	37	32	2.89	.99	157
3 Getting relevant structured information from systems where change is occurring	8	25	46	20	2.79	.87	177
4 Getting source material in time to use it	7	29	51	13	2.69	.79	180
5 Getting the most current background information for a project	7	31	54	8	2.63	.74	180
6 Determining how receptive my own system would be to program or results of studies accomplished elsewhere	13	30	43	14	2.58	.89	168
7 Finding appropriate sources of information	6	39	49	6	2.55	.70	181

Rank Order According To Mean Value	(1) Have Had No Difficulty	(2) Have Had Little Difficulty	(3) Have Had Some Difficulty	(4) Have Had Great Difficulty	Mean	Standard Deviation	Number of Responses
8 Trying to determine the trend (change in emphasis or findings over time) which is evident in literature on the problem	12%	35%	40%	13%	2.54	.87	177
9 Resolving differences between conflicting reports	12	39	39	9	2.45	.82	180
10 Being able to understand research results, curriculum approaches, etc., unless I could personally visit the people responsible	13	40	37	10	2.44	.84	181
11 Getting help to interpret information in research reports or studies	14	44	31	11	2.40	.86	177
12 Trying to relate information derived elsewhere to my problem	14	40	39	7	2.39	.81	181
13 Getting information which is understandable	10	48	36	6	2.38	.75	181
14 Making information understandable to others	15	44	37	3	2.29	.76	180

LEVEL OF SELF-PERCEIVED INVOLVEMENT IN 24 AREAS OF EDUCATIONAL PLANNING

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According To Mean Value	(1) Have had no involvement	(2) Have provided advice when asked	(3) Have served with formal groups or committees which have submitted recommendations	(4) Have been given formal authority to make decisions or develop policy	Mean	Standard Deviation	Number of Responses
1 Determining means of financing school plant expansion	66%	14%	14%	7%	3.39	.96	206
2 Determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school system	45	26	20	9	3.06	1.01	205
3 Planning proposed new buildings and additions	39	20	31	11	2.87	1.05	206
4 Planning school plant expansion	40	17	30	12	2.86	1.08	206
5 Salary scheduling	28	25	39	8	2.74	.96	204
6 Developing school budgets	38	18	20	24	2.70	1.21	207

Rank Order According To Mean Value		(1) Have had no involvement	(2) Have provided advice when asked	(3) Have served with formal groups or committees which have submitted recommendations	(4) Have been given formal authority to make decisions or develop policy	Mean	Standard Deviation	Number of Responses
7	Selection of new teachers	36%	19%	17%	29%	2.61	1.24	205
8	Scheduling of supervisory duties (Playground, lunch, after school)	34	23	11	32	2.59	1.25	207
9	Room assignments	32	27	4	37	2.54	1.28	206
10	Determining daily schedules for the building in which they teach	28	26	11	36	2.46	1.24	207
11	Appraising teacher or administrator effectiveness	28	19	18	35	2.39	1.23	206
12	Determining educational needs in the general area served by my school system	18	21	39	23	2.33	1.02	205
13	Teaching assignments	21	27	13	38	2.32	1.19	206
14	Building rules and regulations	16	32	18	34	2.29	1.10	206

Rank Order According To Mean Value	(1) Have had no involvement	(2) Have provided advice when asked	(3) Have served with formal groups or committees which have submitted recommendations	(4) Have been given formal authority to make decisions or develop policy	Mean	Standard Deviation	Number of Responses
15 Assignment of children to the various classes, sections or teachers	17%	29%	17%	37%	2.26	1.14	206
16 In-service education and teacher orientation	16	20	39	25	2.26	1.01	205
17 Establishing educational objectives	16	14	48	22	2.23	.97	205
18 Determining the schedule in the teacher's own room	17	32	7	44	2.21	1.18	206
19 Evaluating the educational program	12	24	36	28	2.20	.98	206
20 Organization and content of the curriculum	7	25	46	24	2.14	.86	204
21 Grouping, promotion, grade-reporting practices	6	26	39	28	2.11	.89	206
22 Curriculum planning and development	7	21	47	25	2.10	.86	206

Rank Order According To Mean Value		(1) Have had no involvement	(2) Have provided advice when asked	(3) Have served with formal groups or committees which have submitted recommendations	(4) Have been given formal authority to make decisions or develop policy	Mean	Standard Deviation	Number of Responses
23	Selection of instructional supplies	4%	31%	28%	37%	2.01	.92	205
24	Determining method of instruction within classroom	7	18	29	46	1.86	.95	206

EDUCATIONAL DECISIONS RATED ACCORDING TO LEVELS OF IMPORTANCE IN DECISION-MAKING

TABLE A-5

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
1	Decisions to hire new teaching personnel	1%	9%	90%	2.88	.35	182
2	Decisions to terminate teaching personnel	2	13	85	2.84	.41	182
3	Decisions to install new curriculums or innovations	3	13	85	2.82	.45	182
4	Decisions to recommend new curriculums to higher echelons (school board, department heads, superintendent)	2	23	75	2.73	.49	182
5	Decisions to alter student/teacher ratios	4	29	67	2.62	.57	181
6	Decisions to expand utilization of the discovery process as a means of instruction in most grade levels	6	29	65	2.60	.59	181
7	Decisions to alter teacher salaries	7	34	60	2.53	.62	182
8	Decisions to conduct studies of teaching effectiveness	8	30	61	2.53	.65	181
9	Decisions to adopt non-graded instruction	10	32	58	2.48	.67	181

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
10	Decisions to provide for student participation in definition of learning experiences	9%	35%	56%	2.46	.66	180
11	Decisions to develop a new method of interface with parents and the community with respect to educational problems	8	39	53	2.45	.64	179
12	Decisions to replace rote learning and memorization with "open book" approaches somewhat reminiscent of "in the world" work experiences	9	38	52	2.43	.66	180
13	Decisions to change the emphasis in grading procedures	9	40	51	2.42	.65	181
14	Decisions to modify school budget	7	47	46	2.40	.61	181
15	Decisions to adopt flexible scheduling	14	32	54	2.40	.72	182
16	Decisions to conduct evaluational studies of student achievement	11	40	49	2.38	.68	182
17	Decisions to modify staff services (psychological, health, counseling, etc.)	6	51	43	2.38	.59	181
18	Decisions to purchase new textbooks	6	51	43	2.37	.60	180
19	Decisions to alter administrative or staff salaries	10	43	46	2.36	.67	181

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
20	Decisions to emphasize creative utilization of either rote or otherwise learned material	13%	37%	49%	2.36	.71	179
21	Decisions to adopt team teaching	12	42	46	2.35	.68	182
22	Decisions to demote or hold back students	15	35	49	2.34	.73	182
23	Decisions to change teacher in-service training	10	49	40	2.30	.65	182
24	Decisions to expand or modify the educational plant	10	51	39	2.29	.64	182
25	Decisions to expel or suspend students	18	38	44	2.26	.74	182
26	Decisions to group students homogeneously	19	35	46	2.26	.76	182
27	Decisions to transfer teachers to other schools	17	41	42	2.25	.73	182
28	Decisions to change school procedures or instruction due to new county, state or federal requirements	15	44	40	2.25	.71	181
29	Decisions to visit other systems to get new ideas	14	48	38	2.24	.68	182
30	Decisions to increase supervisory duties (non-teaching) of faculty staff	21	38	41	2.20	.77	181

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
31	Decisions to change sequence of instruction within established curriculum areas	15%	55%	30%	2.15	.66	180
32	Decisions to purchase new instructional equipment (tape recorders, teaching machines, projectors, etc.)	15	58	27	2.13	.64	182
33	Decisions to participate in Title III or Title IV projects	23	47	29	2.06	.72	177
34	Decisions to increase community participation of teaching staff	29	39	31	2.02	.78	180
35	Decisions to bring in outside educational consultants	26	51	23	1.97	.70	182
36	Decisions to provide for more supervised study during the school day	31	52	17	1.87	.68	180
37	Decisions to purchase basic school equipment (desks, chairs, plumbing, etc.)	43	47	10	1.68	.66	182
38	Decisions to allow universities to conduct a testing project	47	45	9	1.62	.64	182
39	Decisions to change emphasis in varsity sports programs	60	33	7	1.46	.62	179
40	Decisions to change emphasis in intramural sports programs	63	32	4	1.41	.58	180

TABLE A-6

FACTORS PERCEIVED AS "STUMBLING BLOCKS" IN EFFECTIVE EDUCATIONAL DECISION-MAKING

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According To Mean Value		(1) Does Not Provide A "Stumbling Block"	(2) A Small "Stumbling Block"	(3) A Moderately Strong "Stumbling Block"	(4) A Great "Stumbling Block"	Mean	Standard Deviation	Number of Responses
1	Lack of sufficient time to study the problem	4%	17%	34%	45%	3.21	.86	205
2	Too much focus upon the financial aspects of decision-making	9	17	32	42	3.08	.97	205
3	Need to satisfy many diverse groups	4	29	37	30	2.93	.86	206
4	Lack of qualified skills for providing research support for decision-making	8	27	33	31	2.87	.95	205
5	Failure to define goals or objectives in measurable or "operational" terms	12	24	36	29	2.81	.98	205
6	Lack of organizational structures to translate research results into meaningful terms for the decision-maker	10	29	36	25	2.76	.94	205
7	Difficulty in defining exactly what the problem is	13	31	36	20	2.62	.95	205

Rank Order According To Mean Value	(1) Does Not Provide A "Stumbling Block"	(2) A Small "Stumbling Block"	(3) A Moderately Strong "Stumbling Block"	(4) A Great "Stumbling Block"	Mean	Standard Deviation	Number of Responses
8 Failure to explore alternative solutions	11%	35%	37%	18%	2.60	.90	205
9 Inability to clarify educational issues or projects in the eyes of the community	16	34	29	21	2.54	1.00	202
10 Failure to get pertinent information to the decision-maker on time	12	38	34	16	2.53	.90	206
11 Inability to determine where the same problem is being resolved elsewhere	17	33	36	14	2.48	.93	206
12 Lack of training in decision-making skills	15	41	30	14	2.44	.91	206
13 Inability to integrate committee action with ultimate decision-making	16	41	26	17	2.43	.95	205
14 Study of the wrong variables upon which decisions are based	18	44	23	15	2.35	.94	205
15 Inability to identify causal factors underlying educational problems	18	41	27	14	2.35	.93	206
16 Trying to relate results and programs elsewhere to the local problem	18	44	26	13	2.34	.91	204

Rank Order According To Mean Value	(1) Does Not Provide A "Stumbling Block"	(2) A Small "Stumbling Block"	(3) A Moderately Strong "Stumbling Block"	(4) A Great "Stumbling Block"	Mean	Standard Deviation	Number of Responses
17 Change in nature of problem while decisions are being made	19%	47%	29%	6%	2.21	.82	206
18 Overwhelming pressure from non-educational sources	33	36	21	11	2.10	.98	206

TABLE A-7

LEVELS OF IMPORTANCE OF INFORMATION IN CURRICULUM PLANNING AND DEVELOPMENT

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
1	Effectiveness of current curriculum	1%	10%	90%	2.89	.33	182
2	Teaching skills required for new proposed areas	2	23	75	2.73	.49	181
3	Experimentation or validation of new curriculums prior to adoption	1	27	71	2.70	.48	182
4	Establishment of educational objectives to guide curriculum planning	5	22	73	2.68	.56	181
5	Demands upon students (acquisition of new knowledge, skills, attitudes)	4	33	63	2.59	.57	181
6	New role relationships between teachers and pupils	5	34	61	2.56	.59	181
7	Relevance of learning theory and processes of mental development	7	31	61	2.54	.63	181
8	Content and success of new curriculum being developed elsewhere	4	45	51	2.47	.57	182
9	Articulation of new curriculum with retained curriculum	8	40	51	2.43	.64	181
10	Equipment, resource materials, tapes, slides, etc. which may be required	10	52	38	2.28	.63	181

TABLE A-8

LEVELS OF IMPORTANCE OF INFORMATION IN ADOPTING NEW METHODS OF INSTRUCTION OR NEW INSTRUCTIONAL EQUIPMENT

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
1	Required teaching and administrative skills	3%	39%	59%	2.56	.55	181
2	Change in teacher role with respect to students	5	39	56	2.51	.59	180
3	Community support	10	36	53	2.43	.68	181
4	Time and effort involved in teacher training	7	46	48	2.41	.61	181
5	Evaluational information from other sources on effectiveness, student achievement, etc.	8	45	47	2.39	.64	179
6	Impact upon other on-going methods of instruction	12	46	43	2.31	.67	181
7	Whether adoption is to be limited or widespread	24	47	29	2.06	.73	181
8	Cost of new procedures or equipment	23	50	27	2.04	.71	181
9	Expectations for consultant support	29	52	19	1.90	.69	180
10	Permanence of adoption in other school system	39	46	15	1.76	.70	178

TABLE A-9

LEVELS OF IMPORTANCE OF INFORMATION IN EVALUATING EDUCATIONAL PROGRAMS

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
1	Identifying objectives and goals of the program in measurable terms	5%	24%	71%	2.66	.57	180
2	What methods should be used for evaluating each component selected	5	25	70	2.65	.57	178
3	What components of the program should be evaluated	3	30	66	2.63	.55	179
4	Area of student response to be evaluated (achievement, attitude change, social interaction, etc.)	7	34	59	2.53	.62	179
5	What skills will be necessary for evaluational studies	7	42	50	2.43	.63	179
6	The availability of requisite skills for evaluation	7	45	49	2.42	.62	177
7	Community resistance to evaluation (test results, etc.)	24	49	27	2.03	.72	180
8	How frequently respective educational components should be evaluated	18	62	20	2.02	.62	178

TABLE A-10

LEVELS OF IMPORTANCE OF INFORMATION IN PLANNING NEW BUILDINGS AND ADDITIONS

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
1	An understanding of new directions in which education is moving	2%	18%	81%	2.79	.45	182
2	Projected size of student population	3	22	75	2.72	.52	179
3	Accommodations for new innovative instructional procedures	3	27	70	2.67	.53	182
4	Cost factors, current and projected	8	30	62	2.54	.64	182
5	Facility arrangements (movable walls, ratio of office to classroom space, etc.)	7	32	61	2.54	.62	182
6	Available locations	9	38	52	2.43	.66	180
7	Community acceptance of educational procedures implied in new proposed structures	9	42	49	2.39	.65	181
8	Opportunities for research studies	12	50	38	2.26	.66	180
9	Faculty-student acceptance of new architectural styles	30	49	21	1.91	.71	182
10	Aesthetic preferences of the community	29	52	19	1.90	.68	181

LEVELS OF IMPORTANCE OF INFORMATION IN APPRAISAL OF TEACHER OR ADMINISTRATOR EFFECTIVENESS

TABLE A-11

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
1	Criteria for an effective appraisal system	1%	16%	83%	2.82	.41	182
2	Faculty and staff reactions to appraisal programs	2	22	76	2.74	.49	182
3	How educational workloads affect performance	5	32	62	2.57	.60	182
4	Reactions of teachers associations, unions, etc.	7	40	53	2.46	.63	182
5	Role of incentives in performance appraisal programs	12	42	47	2.35	.68	180
6	What comprises a fair "work sample" in education	9	48	43	2.34	.64	181
7	Problems in operational implementation of appraisal programs	7	58	35	2.28	.59	178
8	Comparability of job assignments for purposes of appraising differences in effectiveness	12	51	38	2.26	.65	180
9	Effects of transfers in assignment upon performance	17	48	35	2.18	.70	180
10	Effective evaluation systems in operation elsewhere	18	64	18	1.99	.60	180

TABLE A-12

LEVELS OF IMPORTANCE OF INFORMATION IN GROUPING, PROMOTION AND GRADE REPORTING PRACTICES

FORM A

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Minimally Important	(2) Moderately Important	(3) Highly Important	Mean	Standard Deviation	Number of Responses
1	Effects upon students with respect to maturation, achievement, fast learners, etc.	1%	16%	83%	2.82	.40	182
2	Teacher reactions to new practices	1	21	78	2.77	.43	182
3	New skills and demands to be placed upon teaching staff	1	25	74	2.74	.45	182
4	Success at higher levels of education by students exposed to new innovative methods of grading, grouping, etc.	4	35	61	2.57	.58	182
5	Community acceptance of new systems of grouping or promotion	7	42	51	2.44	.63	182
6	How other programs and findings relate to the local situation	12	48	40	2.28	.67	181
7	Cost factors with respect to time, new materials and classroom accommodations	13	50	37	2.24	.67	182
8	Evaluation of effectiveness of innovations in other systems	14	57	29	2.14	.64	181

TABLE A-13

DEGREE OF DIFFICULTY IN OBTAINING INFORMATION NECESSARY FOR DECISIONS IN EDUCATIONAL PLANNING AREAS

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Not Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Very Difficult to Obtain	Mean	Standard Deviation	Number of Responses
1	Experimentation or validation of new curriculums prior to adoption	18%	42%	40%	2.21	.73	206
2	Relevance of learning theory and processes of mental development	26	39	35	2.09	.77	203
3	Effectiveness of current curriculum	26	45	29	2.03	.74	206
4	New role relationships between teachers and pupils	24	48	28	2.03	.72	203
5	Teaching skills required for new proposed areas	24	50	26	2.01	.71	205
6	Articulation of new curriculum with retained curriculum	24	57	20	1.96	.66	205
7	Demands upon students (acquisition of new knowledge, skills, attitudes)	28	55	17	1.89	.66	204
8	Establishment of educational objectives to guide curriculum planning	36	47	18	1.82	.71	204
9	Equipment, resource materials, tapes, slides, etc. which may be required	43	37	20	1.77	.76	206
10	Content and success of new curriculum being developed elsewhere	39	50	11	1.72	.65	206

TABLE A-14

DEGREE OF DIFFICULTY IN OBTAINING INFORMATION FOR DECISIONS FOR ADOPTING NEW METHODS OF INSTRUCTION OR NEW INSTRUCTIONAL EQUIPMENT

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Not Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Very Difficult to Obtain	Mean	Standard Deviation	Number of Responses
1	Time and effort involved in teacher retraining	15%	50%	35%	2.20	.68	205
2	Impact upon other on-going methods of instruction	16	56	28	2.13	.65	205
3	Evaluative information from other sources in effectiveness, student achievement, etc.	20	49	30	2.10	.71	205
4	Change in teacher role with respect to students	22	46	32	2.09	.73	203
5	Permanence of adoption in other school systems	22	50	28	2.06	.71	202
6	Required teaching and administrative skills	26	55	19	1.92	.67	205
7	Expectations for consultant support	34	53	13	1.79	.65	202
8	Whether adoption is to be limited or widespread	41	49	10	1.69	.65	201
9	Cost of new procedures or equipment	51	30	19	1.67	.77	204
10	Community support	46	42	12	1.66	.68	203

DEGREE OF DIFFICULTY IN OBTAINING INFORMATION FOR DECISIONS IN EVALUATING EDUCATIONAL PROGRAMS TABLE A-15

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Not Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Very Difficult to Obtain	Mean	Standard Deviation	Number of Responses
1	Identifying objectives and goals of the program in measurable terms	12%	45%	42%	2.30	.68	201
2	What methods should be used for evaluating each component selected	11	56	33	2.22	.63	201
3	The availability of requisite skills for evaluation	15	52	33	2.18	.67	199
4	What skills will be necessary for evaluational studies	17	53	30	2.13	.67	200
5	What components of the program should be evaluated	25	56	18	1.93	.66	201
6	Area of student response to be evaluated (achievement, attitude change, social interaction, etc.)	29	49	21	1.92	.71	201
7	How frequently respective educational components should be evaluated	30	49	21	1.91	.71	200
8	Community resistance to evaluation (test results, etc.)	44	43	12	1.67	.68	200

TABLE A-16

DEGREE OF DIFFICULTY IN OBTAINING INFORMATION FOR DECISIONS IN PLANNING NEW BUILDINGS AND ADDITIONS

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Not Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Very Difficult to Obtain	Mean	Standard Deviation	Number of Responses
1	Opportunities for research studies	20%	49%	31%	2.11	.71	197
2	An understanding of new directions in which education is moving	30	45	24	1.94	.74	198
3	Accommodations for new innovative instructional procedures	29	50	21	1.92	.71	195
4	Aesthetic preferences of the community	32	45	22	1.90	.74	197
5	Community acceptance of educational procedures implied in new proposed structures	26	59	15	1.89	.64	198
6	Faculty-student acceptance of new architectural styles	46	39	15	1.69	.71	198
7	Facility arrangements (movable walls, ratio of office to classroom space)	49	38	13	1.64	.70	196
8	Projected size of student population	45	47	8	1.63	.63	196
9	Cost factors, current and projected	63	26	12	1.49	.70	196
10	Available locations	64	27	9	1.44	.65	196

TABLE A-17

DEGREE OF DIFFICULTY IN OBTAINING INFORMATION FOR DECISIONS IN APPRAISING TEACHER OR ADMINISTRATOR EFFECTIVENESS

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Not Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Very Difficult to Obtain	Mean	Standard Deviation	Number of Responses
1	Comparability of job assignments for purposes of appraising differences in effectiveness	9%	41%	50%	2.41	.65	198
2	What comprises a fair "work sample" in education	14	45	41	2.28	.69	199
3	How educational workloads affect performance	18	38	44	2.26	.75	200
4	Role of incentives in performance appraisal programs	17	40	42	2.25	.73	200
5	Effects of transfers in assignment upon performance	16	49	35	2.20	.69	199
6	Criteria for an effective system	19	44	37	2.18	.73	201
7	Problems in operational implementation of appraisal programs	14	58	29	2.15	.64	198
8	Effective evaluation systems in operation elsewhere	28	51	21	1.93	.70	200
9	Faculty and staff reactions to appraisal programs	53	35	11	1.58	.69	200
10	Reactions of teachers associations, unions, etc.	62	27	11	1.49	.69	200

TABLE A-18

DEGREE OF DIFFICULTY IN OBTAINING INFORMATION FOR DECISIONS ON GROUPING, PROMOTION AND GRADE REPORTING PRACTICES

FORM B

Percent, Mean, Standard Deviation and Number of Actual Responses

Rank Order According to Mean Value		(1) Not Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Very Difficult to Obtain	Mean	Standard Deviation	Number of Responses
1	Success at high levels of education by students exposed to new innovative methods of grading, grouping, etc.	13%	46%	40%	2.26	.68	200
2	How other programs and findings relate to the local situation	16	51	32	2.16	.68	202
3	Evaluation of effectiveness of innovations in other systems	19	47	34	2.15	.71	202
4	Effects upon students with respect to maturation, achievement, fast learners, etc.	22	43	35	2.13	.75	202
5	New skills and demands to be placed upon teaching staff	20	59	21	2.01	.64	199
6	Cost factors with respect to time, new materials and classroom accommodations	39	38	23	1.84	.78	200
7	Community acceptance of new systems of grouping or promotion	35	51	14	1.79	.67	202
8	Teacher reactions to new practices	53	37	10	1.57	.67	202

TABLE A-19

RANKINGS OF SOURCES OF INNOVATION INTERNAL TO SCHOOL DISTRICTS BY 48 SUPERINTENDENTS AND ASSISTANT SUPERINTENDENTS

Innovations \ Sources	School board	School district superintendent	Assistant Superintendent/Director/Coordinator/for Instruction	Assistant Superintendent/Director/Coordinator/for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
	1	2	3	4	5	6	7	8
"New" sciences	6	7.5	1	4	3	5	7.5	2
"New" math	7	4	2	4	4	6	8	1
"New" social studies	6.5	6.5	3.5	3.5	2	5	8	1
TV instruction	7	3.5	1.5	5	1.5	3.5	8	6
Programmed learning ("scrambled books," teaching machines, etc.)	6.5	5	4	6.5	2	2	8	2
Language lab	7	3	5	6	2	4	8	1
Computer-aided instruction	6	6	1	6	2	3.5	8	3.5
Simulation or gaming	5.5	5.5	3.5	7.5	3.5	2	7.5	1

	School board	School district superintendent	Assistant Superintendent/ Director/Coordinator/ for Instruction	Assistant Superintendent/ Director/Coordinator for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
Sources Innovations	1	2	3	4	5	6	7	8
Flexible scheduling	5.5	2	3.5	7.5	3.5	1	7.5	5.5
Team teaching	5.5	2	4	5.5	7	1	8	3
Non-graded instruction	7	2	3	5.5	5.5	1	8	4
Teacher aides (para-professionals)	7.5	2	4.5	6	3	1	7.5	4.5
Cultural enrichment	6	4.5	2	8	1	7	4.5	3
Work-study program	5.5	4	2.5	7.5	1	2.5	7.5	5.5
Student exchange program	4.5	7	4.5	8	4.5	1	4.5	2
Individualized instruction	7	1.5	5.5	5.5	3	4	8	1.5

TABLE A-20

RANKINGS OF SOURCES OF INNOVATION INTERNAL TO SCHOOL DISTRICTS BY 64 SPECIALISTS AT DISTRICT STAFF LEVEL

Sources / Innovations	School board	School district superintendent	Assistant Superintendent/ Director/Coordinator/ for Instruction	Assistant Superintendent/ Director/Coordinator/ for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
	1	2	3	4	5	6	7	8
"New" sciences	6.5	6.5	3	4	1	5	8	2
"New" math	6.5	5	2	3.5	1	6.5	8	3.5
"New" social studies	6.5	6.5	3	4	1	5	8	2
TV instruction	7.5	4	2	1	3	5	7.5	6
Programmed learning ("scrambled books," teaching machines, etc.)	7	7	4	2.5	1	5	7	2.5
Language lab	7	5.5	4	3	1	5.5	8	2
Computer-aided instruction	7.5	3.5	3.5	2	1	5.5	7.5	5.5
Simulation or gaming	7	7	4	3	2	5	7	1

Sources	School board	School district superintendent	Assistant Superintendent/ Director/Coordinator/ for Instruction	Assistant Superintendent/ Director/Coordinator/ for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
Innovations	1	2	3	4	5	6	7	8
Flexible scheduling	7.5	3	2	4	7.5	1	6	5
Team teaching	8	4.5	2.5	4.5	6	1	7	2.5
Non-graded instruction	7.5	3	2	4.5	6	1	7.5	4.5
Teacher aides (para-professionals)	8	2	1	5	6	3	7	4
Cultural enrichment	8	5	1	2.5	2.5	6.5	6.5	4
Work-study program	7.5	4.5	1	2	4.5	3	7.5	6
Student exchange program	8	2.5	1	6.5	6.5	2.5	4	5
Individualized instruction	7.5	6	4	3	2	5	7.5	1

TABLE A-21

SOURCES OF INNOVATION INTERNAL TO SCHOOL DISTRICTS BY 134 PRINCIPALS AND VICE PRINCIPALS

	School board	School district superintendent	Assistant Superintendent/ Director/Coordinator/ for Instruction	Assistant Superintendent Director/Coordinator/ for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
Sources Innovations	1	2	3	4	5	6	7	8
"New" sciences	7	6	2	4	5	3	8	1
"New" math	7	5.5	2	3	5.5	4	8	1
"New" social studies	7	6	2	4	5	3	8	1
TV instruction	8	3	2	4	5	1	7	6
Programmed learning ("scrambled books," teaching machines, etc.)	8	7	4	6	3	1	5	2
Language lab	7.5	6	4	5	3	2	7.5	1
Computer-aided instruction	6.5	4	2	4	4	1	6.5	8
Simulation or gaming	8	6	4	6	3	2	6	1

	School board	School district superintendent	Assistant Superintendent/ Director/Coordinator/ for Instruction	Assistant Superintendent/ Director/Coordinator for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
Sources Innovations	1	2	3	4	5	6	7	8
Flexible scheduling	4	3	5.5	5.5	7	1	8	2
Team teaching	6	3	4	5	8	1	7	2
Non-graded instruction	7	6	3	3	5	1	8	3
Teacher aides (para-professionals)	8	3	2	6	5	1	7	4
Cultural enrichment	7	7	3	7	5	1	4	2
Work-study program	8	3.5	1.5	3.5	5	1.5	7	6
Student exchange program	4.5	7	4.5	7	7	1.5	1.5	3
Individualized instruction	6	3.5	6	8	3.5	1	6	2

TABLE A-22

RANKINGS OF SOURCES OF INNOVATION INTERNAL TO SCHOOL DISTRICTS BY 142 TEACHERS

	School board	School district superintendent	Assistant Superintendent/ Director/Coordinator/ for Instruction	Assistant Superintendent/ Director/Coordinator/ for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
Sources / Innovations	1	2	3	4	5	6	7	8
"New" sciences	5	2	6	3.5	3.5	7	8	1
"New" math	4	1	6	3	5	7	8	2
"New" social studies	6	2.5	4	5	2.5	7	8	1
TV instruction	4	5.5	5.5	3	7	2	8	1
Programmed learning ("scrambled books," teaching machines, etc.)	6	4.5	7	4.5	3	2	8	1
Language lab	7	4.5	6	3	2	4.5	8	1
Computer-aided instruction	4.5	6.5	4.5	1	6.5	2.5	8	2.5
Simulation or gaming	6	6	6	2.5	2.5	4	8	1

	School board	School district superintendent	Assistant Superintendent/ Director/Coordinator/ for Instruction	Assistant Superintendent/ Director/Coordinator/ for Curriculum	Educational specialists or consultants at district level	School principal or vice principal	Research office at school level	Teachers
Sources Innovations	1	2	3	4	5	6	7	8
Flexible scheduling	6	3	6	6	4	1	8	2
Team teaching	6.5	3	4	5	6.5	2	8	1
Non-graded instruction	7	3	6	5	4	1	8	2
Teacher aides (para-professionals)	6	3	5	4	7	2	8	1
Cultural enrichment	8	4.5	7	4.5	2.5	2.5	6	1
Work-study program	6.5	3	5	4	1.5	6.5	8	1.5
Student exchange program	4.5	4.5	7	8	4.5	4.5	1	2
Individualized instruction	7.5	4.5	4.5	6	3	2	7.5	1

TABLE A-23

RANKINGS OF SOURCES EXTERNAL TO SCHOOL DISTRICTS FROM WHICH INNOVATIONS ARE DRAWN AS PERCEIVED BY 48 SUPERINTENDENTS AND ASSISTANT SUPERINTENDENTS

	County office of education	State Department of Education	Title III or PACE Center and Title IV Regional Centers	University education R&D Centers	University courses or University professors	Programs in other school districts	Symposia, professional meetings, workshops	None--idea arose purely within district	Don't know--source external to district is unknown
Sources / Innovations	1	2	3	4	5	6	7	8	9
"New" sciences	8	1	9	3.5	6.5	6.5	2	3.5	5
"New" math	8.5	1	8.5	5	3.5	6.5	2	6.5	3.5
"New" social studies	7	1	9	7	5	7	2	4	3
TV instruction	1	7	7	7	9	2	5	4	3
Programmed learning ("scrambled books," teaching machines, etc.)	8	8	6	8	5	1	4	3	2
Language lab	8.5	6	7	8.5	5	2	4	3	1
Computer-aided instruction	3.5	9	3.5	6.5	6.5	1	6.5	6.5	2
Simulation or gaming	7	7	1	9	7	4.5	2	3	4.5

	County office of education	State Department of Education	Title III or PACE Center and Title IV Regional Centers	University education R&D Centers	University courses or University professors	Programs in other school districts	Symposia, professional meetings, workshops	None--idea arose purely within district	Don't know--source external to district is unknown
Sources Innovations	1	2	3	4	5	6	7	8	9
Flexible scheduling	8	8	8	3	4.5	1	6	4.5	2
Team teaching	8	8	8	5.5	4	1	3	5.5	2
Non-graded instruction	7.5	7.5	7.5	7.5	3.5	1	3.5	5	2
Teacher aides (para-professionals)	5	7.5	7.5	9	6	1	3.5	3.5	2
Cultural enrichment	4.5	7	4.5	9	7	2.5	7	2.5	1
Work-study program	5	3	5	7.5	9	1	7.5	5	2
Student exchange program	7	7	7	7	7	1.5	4	3	1.5
Individualized instruction	6.5	9	6.5	6.5	4	1	3	6.5	2

RANKINGS OF SOURCES EXTERNAL TO SCHOOL DISTRICTS FROM WHICH INNOVATIONS ARE DRAWN AS PERCEIVED BY 64 SPECIALISTS AT DISTRICT STAFF LEVEL

TABLE A-24

	County office of education	State Department of Education	Title III or PACE Center and Title IV Regional Centers		University education R&D Centers	University courses or University professors	Programs in other school districts	Symposia, professional meetings, workshops	None--idea arose purely within district	Don't know--source external to district is unknown
Sources Innovations	1	2	3	4	5	6	7	8	9	
"New" sciences	6	1	9	6	4	8	2	6	3	
"New" math	5	1	9	7	4	6	2	8	3	
"New" social studies	7.5	1	9	7.5	5.5	5.5	2	4	3	
TV instruction	1	8.5	6.5	6.5	8.5	3	5	4	2	
Programmed learning ("scrambled books," teaching machines, etc.)	9	7.5	5.5	7.5	4	2	1	5.5	3	
Language lab	8.5	6.5	6.5	8.5	4	2	3	5	1	
Computer-aided instruction	8	8	5.5	8	5.5	2.5	2.5	4	1	
Simulation or gaming	8	8	8	6	4	4	2	4	1	

Sources Innovations	County office of education	State Department of Education	Title III or PACE Center and Title IV Regional Centers	University education R&D Centers	University courses or University professors	Programs in other school districts	Symposia, professional meetings, workshops	None--idea arose purely within district	Don't know--source external to district is unknown
	1	2	3	4	5	6	7	8	9
Flexible scheduling	8	8	8	6	4	1	3	5	2
Team teaching	8	5.5	8	5.5	4	1	2	8	3
Non-graded instruction	8	8	8	6	4	1	2	5	3
Teacher aides (para-professionals)	8.5	4.5	6	8.5	7	1	3	4.5	2
Cultural enrichment	9	5	6.5	8	6.5	4	3	2	1
Work-study program	8.5	2	7	8.5	4.5	3	4.5	6	1
Student exchange program	5.5	8	5.5	8	8	2	4	3	1
Individualized instruction	9	6	7.5	7.5	2	3	1	4	5

RANKINGS OF SOURCES EXTERNAL TO SCHOOL DISTRICTS FROM WHICH INNOVATIONS ARE DRAWN AS PERCEIVED BY 134 PRINCIPALS AND VICE PRINCIPALS

Sources	County office of education	State Department of Education	Title III or PACE Center and Title IV Regional Centers	University education R&D Centers	University courses or University professors	Programs in other school districts	Symposia, professional meetings, workshops	None--idea arose purely within district	Don't know--source external to district is unknown
Innovations	1	2	3	4	5	6	7	8	9
"New" sciences	3	1	9	4	5.5	8	2	7	5.5
"New" math	2	1	9	5.5	3	5.5	4	8	7
"New" social studies	2	1	9	8	3.5	6	5	3.5	7
TV instruction	1	8	9	6	7	4	5	3	2
Programmed learning ("scrambled books," teaching machines, etc.)	7.5	9	7.5	6	5	1	2	4	3
Language lab	6.5	8.5	5	8.5	6.5	1	2.5	4	2.5
Computer-aided instruction	5.5	9	7.5	2	5.5	3.5	7.5	3.5	1
Simulation or gaming	8	8	6	8	2.5	4.5	2.5	4.5	1

Sources / Innovations	County office of education	State Department of Education	Title III or PACE Center and Title IV Regional Centers	University education R&D Centers	University courses or University professors	Programs in other school districts	Symposia, professional meetings, workshops	None--idea arose purely within district	Don't know--source external to district is unknown
	1	2	3	4	5	6	7	8	9
Flexible scheduling	8	8	8	6	5	1	4	3	2
Team teaching	8.5	7	8.5	6	4.5	1	2	4.5	3
Non-graded instruction	7	8.5	8.5	6	4.5	1	2	3	4.5
Teacher aides (para-professionals)	7.5	6	5	9	7.5	1	4	2.5	2.5
Cultural enrichment	6.5	8	5	9	6.5	4	3	2	1
Work-study program	7	4	5	8.5	8.5	2	6	3	1
Student exchange program	7.5	4	7.5	7.5	7.5	3	5	1.5	1.5
Individualized instruction	8.5	6	8.5	7	4	1	2	3	5

TABLE A-26

RANKINGS OF SOURCES EXTERNAL TO SCHOOL DISTRICTS FROM WHICH INNOVATIONS ARE DRAWN AS PERCEIVED BY 142 TEACHERS

Sources	County office of education	State Department of Education	Title III or PACE Center and Title IV Regional Centers	University education R&D Centers	University courses or University professors	Programs in other school districts	Symposia, professional meetings, workshops	None--idea arose purely within district	Don't know--source external to district is unknown
Innovations	1	2	3	4	5	6	7	8	9
"New" sciences	6	1	7	8	5	9	3	4	2
"New" math	7.5	1	7.5	9	4	5.5	3	5.5	2
"New" social studies	5	1	8	9	6.5	6.5	3	4	2
TV instruction	2	5	9	6.5	3.5	6.5	8	3.5	1
Programmed learning ("scrambled books," teaching machines, etc.)	7	9	7	7	4.5	2.5	2.5	4.5	1
Language lab	7	4	8.5	8.5	4	4	2	6	1
Computer-aided instruction	9	6.5	6.5	2	6.5	3	6.5	4	1
Simulation or gaming	6	8.5	8.5	6	6	3.5	3.5	2	1

APPENDIX B

Survey of the Decision Process and Information Needs In Education

Form A

Stanford Research Institute is conducting a study for the Far West Laboratory for Educational Research and Development which is concerned with the process of decision-making and informational needs in education. The emphasis is upon determining the frequency of certain educational decisions, sources of information utilized, problems inherent in obtaining appropriate information in time to make decisions, and the decisions which different types of educational personnel are called upon to make. Significant results from this study are to be placed in the hands of those who are concerned with improving the effectiveness of educational information systems and the educational decision process.

Please give careful consideration to your answers and fill out the questionnaire completely. Individual responses to the questionnaire will be held in strictest confidence and will never be identified by name.

When you have finished, please place the questionnaire in the envelope which has been provided and insure that it is sealed. Your cooperation in taking the time to fill out the questionnaire is appreciated.

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Far West Laboratory for
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Listed below are a wide variety of sources (people and places) which could conceivably be used to provide information for educational planning and change or for educational decision-making. Indicate the frequency with which you have employed such sources in your previous experience by placing a check (✓) in the appropriate column. Mark each item only once.

	(1) With High Frequency	(2) With Moderate Frequency	(3) With Little Frequency	(4) Have Never Used This Source
1-19 Principals and vice-principals	______	______	______	______
1-20 Curriculum specialists	______	______	______	______
1-21 Academic department heads	______	______	______	______
1-22 University professors	______	______	______	______
1-23 Colleagues in same school systems	______	______	______	______
1-24 Colleagues in other school system	______	______	______	______
1-25 Educational consultants (inside school system)	______	______	______	______
1-26 Educational consultants (from outside of school system)	______	______	______	______
1-27 Title III Centers (PACE)	______	______	______	______
1-28 Title IV Centers	______	______	______	______
1-29 University R&D Centers	______	______	______	______
1-30 Local citizens and community groups	______	______	______	______
1-31 County Offices of Education	______	______	______	______
1-32 Local public libraries	______	______	______	______
1-33 University libraries	______	______	______	______
1-34 Local professional educational libraries	______	______	______	______

	(1) With High Frequency	(2) With Moderate Frequency	(3) With Little Frequency	(4) Have Never Used This Source
1-35 Teachers associations or unions	______	______	______	______
1-36 State Department of Education	______	______	______	______
1-37 Publishers of educational texts	______	______	______	______
1-38 School Boards	______	______	______	______
1-39 Professional meetings (annual, semi-annual, etc.)	______	______	______	______
1-40 Directors of Instruction	______	______	______	______
1-41 School district superintendents, asst-superintendents (direct contact)	______	______	______	______
1-42 Federal education programs (MDTA, Job Corps, etc.)	______	______	______	______
1-43 Industrial training programs	______	______	______	______
1-44 Research office at school level	______	______	______	______

1-45 Other (specify briefly and indicate frequency of use--
write "NONE" if you cannot recall other sources.)

______________________________	______	______	______	______
______________________________	______	______	______	______
______________________________	______	______	______	______
______________________________	______	______	______	______
______________________________	______	______	______	______

Certain problems are attendant upon the utilization of information sources and materials with respect to their meaning, interpretation, application in the local environment, etc. Indicate the severity of each of the problem areas below with respect to the difficulties you have experienced with them. Answer each item once by placing a check (✓) in the appropriate column.

		(1) Have Had Great Difficulty	(2) Have Had Some Difficulty	(3) Have Had Little Difficulty	(4) Have Had No Difficulty
1-46	Getting the most current background information for a project	_____	_____	_____	_____
1-47	Finding appropriate sources of information	_____	_____	_____	_____
1-48	Getting information which is understandable	_____	_____	_____	_____
1-49	Making information understandable to others	_____	_____	_____	_____
1-50	Getting source material in time to use it	_____	_____	_____	_____
1-51	Trying to relate information derived elsewhere to my problem	_____	_____	_____	_____
1-52	Resolving differences between conflicting reports	_____	_____	_____	_____
1-53	Trying to determine the trend (change in emphasis or findings over time) which is evident in literature on the problem	_____	_____	_____	_____
1-54	Getting relevant structured information from systems where change is occurring	_____	_____	_____	_____
1-55	Getting help to interpret information in research reports or studies	_____	_____	_____	_____
1-56	Being able to understand research results, curriculum approaches, etc., unless I could personally visit the people responsible	_____	_____	_____	_____

	(1) Have Had Great Difficulty	(2) Have Had Some Difficulty	(3) Have Had Little Difficulty	(4) Have Had No Difficulty
1-57 Understanding the procedures for getting information from ERIC, DATRIX, State information systems, etc.	______	______	______	______
1-58 Deciding whether the statistical results of a research study are sufficiently strong to warrant adoption of the findings	______	______	______	______
1-59 Determining how receptive my own system would be to program or results of studies accomplished elsewhere	______	______	______	______

1-60 Other (please specify briefly and indicate degree of difficulty, if any; answer "NONE" if you cannot identify other problems in the utilization of educational information.)

______________________	______	______	______	______
______________________	______	______	______	______
______________________	______	______	______	______
______________________	______	______	______	______
______________________	______	______	______	______
______________________	______	______	______	______
______________________	______	______	______	______
______________________	______	______	______	______

Can you recall any instances where educational planning for change of any kind, curriculum or instructional change, general school functioning, etc. suffered from the lack of background information or supportive findings, or failed to get implemented altogether due to lack of appropriate information?

1-61 Yes [1] ____

No [2] ____

If you checked "yes," describe briefly the following:

Type of project

Kind(s) of information not available or inadequate

____

____

____

____

____

____

____

____

Type of project ______________________________

Kind(s) of information not available or inadequate

____

____

____

____

____

____

____

____

Listed below are a wide variety of educational decisions. Read each one and rate it according to its "importance," i.e., whether in your opinion, and experience, it is "Highly Important," "Moderately Important," or "Minimally Important" in the general context of the educational process and the functioning of school systems. Do not spend too much time on each item. Read each one rapidly and indicate your first impression with respect to "importance." Place a check (✓) in the appropriate column. Try your best to use all three rating categories. But, remember each item is to be checked only once.

	Level of Importance in Decision-Making		
	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
1-62 Decisions to hire new teaching personnel	______	______	______
1-63 Decisions to terminate teaching personnel	______	______	______
1-64 Decisions to purchase new textbooks	______	______	______
1-65 Decisions to install new curriculums or innovations	______	______	______
1-66 Decisions to purchase new instructional equipment (tape recorders, teaching machines, projectors, etc.)	______	______	______
1-67 Decisions to purchase basic school equipment (desks, chairs, plumbing, etc.)	______	______	______
1-68 Decisions to recommend new curriculums to higher echelons (school board, department heads, superintendent)	______	______	______
1-69 Decisions to modify school budget	______	______	______
1-70 Decisions to alter student/teacher ratios	______	______	______
1-71 Decisions to expell or suspend students	______	______	______
1-72 Decisions to demote or hold back students	______	______	______
1-73 Decisions to group students homogeneously	______	______	______

		(1) Highly Important	(2) Moderately Important	(3) Minimally Important
1-74	Decisions to adopt team teaching	______	______	______
1-75	Decisions to adopt flexible scheduling	______	______	______
1-76	Decisions to adopt non-graded instruction	______	______	______
1-77	Decisions to transfer teachers to other schools	______	______	______
1-78	Decisions to alter teacher salaries	______	______	______
1-79	Decisions to alter administrative or staff salaries	______	______	______
1-80	Decisions to visit other systems to get new ideas	______	______	______
2-6	Decisions to expand or modify the educational plant	______	______	______
2-7	Decisions to conduct evaluational studies of student achievement	______	______	______
2-8	Decisions to conduct studies of teaching effectiveness	______	______	______
2-9	Decisions to bring in outside educational consultants	______	______	______
2-10	Decisions to change teacher in-service training	______	______	______
2-11	Decisions to allow universities to conduct a testing project	______	______	______
2-12	Decisions to participate in Title III or Title IV projects	______	______	______
2-13	Decisions to change emphasis in varsity sports programs	______	______	______
2-14	Decisions to change emphasis in intramural sports programs	______	______	______

	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
2-15 Decisions to modify staff services (psychological, health, counseling, etc.)	______	______	______
2-16 Decisions to change school procedures or instruction due to new county, state or federal requirements	______	______	______
2-17 Decisions to increase community participation of teaching staff	______	______	______
2-18 Decisions to increase supervisory duties (non-teaching) of faculty staff	______	______	______
2-19 Decisions to provide for more supervised study during the school day	______	______	______
2-20 Decisions to emphasize creative utilization of either rote or otherwise learned material	______	______	______
2-21 Decisions to expand utilization of the discovery process as a means of instruction in most grade levels	______	______	______
2-22 Decisions to replace rote learning and memorization with "open book" approaches somewhat reminiscent of "in the world" work experiences	______	______	______
2-23 Decisions to change the emphasis in grading procedures	______	______	______
2-24 Decisions to change sequence of instruction within established curriculum areas	______	______	______
2-25 Decisions to provide for student participation in definition of learning experiences	______	______	______
2-26 Decisions to develop a new method of interface with parents and the community with respect to educational problems	______	______	______

Listed below are several areas of educational planning. With each planning area are shown several pieces of information which could have a bearing upon decisions.

Read each information item and determine whether in your opinion it is "Highly Important," "Moderately Important," or "Minimally Important" with respect to decision-making in the planning area under which it is grouped. Indicate your choice as to importance in the appropriate column. Check (✓) each information item only once.

Within each planning area, list other items which could be relevant to decision-making and also rate your write-in items according to their "importance." Write "None" if you cannot recall any.

Try your best to use all three levels of "importance" as much as possible; but remember, answer each item only once.

	Level of Importance in Planning		
Educational Planning Areas	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
Curriculum planning and development			
2-27 Content and success of new curriculum being developed elsewhere	____	____	____
2-28 Effectiveness of current curriculum	____	____	____
2-29 Experimentation or validation of new curriculums prior to adoption	____	____	____
2-30 Teaching skills required for new proposed areas	____	____	____
2-31 Equipments, resource materials, tapes, slides, etc., which may be required	____	____	____
2-32 New role relationships between teachers and pupils	____	____	____
2-33 Demands upon students (acquisition of new knowledge, skills, attitudes)	____	____	____
2-34 Relevance of learning theory and processes of mental development	____	____	____

Curriculum planning and development (continued)	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
2-35 Establishment of educational objectives to guide curriculum planning	______	______	______
2-36 Articulation of new curriculum with retained curriculum	______	______	______
2-37 Others (specify briefly and rate for "importance"--write "NONE" if you cannot recall any.)			
________________________	______	______	______
________________________	______	______	______
________________________	______	______	______
________________________	______	______	______
________________________	______	______	______
Adopting new methods of instruction or new instructional equipments			
2-38 Evaluational information from other sources on effectiveness, student achievement, etc.	______	______	______
2-39 Change in teacher role with respect to students	______	______	______
2-40 Cost of new procedures or equipments	______	______	______
2-41 Time and effort involved in teacher retraining	______	______	______
2-42 Required teaching and administrative skills	______	______	______
2-43 Community support	______	______	______
2-44 Expectations for consultant support	______	______	______
2-45 Whether adoption is to be limited or widespread	______	______	______
2-46 Impact upon other on-going methods of instruction	______	______	______

Adopting new methods of instruction or new instructional equipments (continued)	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
2-47 Permanence of adoption in other school system	____	____	____
2-48 Others (specify briefly and rate according to "importance"--write "NONE" if you cannot recall any.)			
____________________	____	____	____
____________________	____	____	____
____________________	____	____	____
____________________	____	____	____
____________________	____	____	____
Evaluating the educational programs			
2-49 What components of the program should be evaluated	____	____	____
2-50 What methods should be used for evaluating each component selected	____	____	____
2-51 What skills will be necessary for evaluational studies	____	____	____
2-52 The availability of requisite skills for evaluation	____	____	____
2-53 How frequently respective educational components should be evaluated	____	____	____
2-54 Community resistance to evaluation (test results, etc.)	____	____	____
2-55 Area of student response to be evaluated (achievement, attitude change, social interaction, etc.)	____	____	____
2-56 Identifying objectives and goals of the program in measurable terms	____	____	____

Evaluating the educational programs (continued)	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
2-57 Others (specify briefly and rate according to "importance"--write "NONE" if you cannot recall any.)			
____________________	______	______	______
____________________	______	______	______
____________________	______	______	______
____________________	______	______	______
____________________	______	______	______
Planning proposed new buildings and additions			
2-58 Cost factors, current and projected	______	______	______
2-59 Available locations	______	______	______
2-60 Projected size of student population	______	______	______
2-61 Facility arrangements (movable walls, ratio of office to classroom space, etc.)	______	______	______
2-62 Accommodations for new innovative instructional procedures	______	______	______
2-63 An understanding of new directions in which education is moving	______	______	______
2-64 Opportunities for research studies	______	______	______
2-65 Aesthetic preferences of the community	______	______	______
2-66 Faculty-student acceptance of new architectural styles	______	______	______
2-67 Community acceptance of educational procedures implied in new proposed structures	______	______	______

Planning proposed new building and additions (continued)	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
2-68 Others (specify briefly and evaluate according to "importance"-- write "NONE" if you cannot recall any.)			
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____
Appraising teacher or administrator effectiveness			
2-69 Criteria for an effective appraisal system	_____	_____	_____
2-70 Effective evaluation systems in operation elsewhere	_____	_____	_____
2-71 Reactions of teachers associations, unions, etc.	_____	_____	_____
2-72 What comprises a fair "work sample" in education	_____	_____	_____
2-73 How educational workloads affect performance	_____	_____	_____
2-74 Role of incentives in performance appraisal programs	_____	_____	_____
2-75 Effects of transfers in assignment upon performance	_____	_____	_____
2-76 Problems in operational implementation of appraisal programs	_____	_____	_____
2-77 Faculty and staff reactions to appraisal programs	_____	_____	_____
2-78 Comparability of job assignments for purposes of appraising differences in effectiveness	_____	_____	_____

Appraising teacher or Administrator effectiveness (continued)	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
2-79 Others (specify briefly and rate according to "importance"--write "NONE" if you cannot recall any.)			
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____
Grouping, promotion, grade-reporting practices			
2-80 Evaluation of effectiveness of innovations in other systems	_____	_____	_____
3-6 How other programs and findings relate to the local situation	_____	_____	_____
3-7 New skills and demands to be placed upon teaching staff	_____	_____	_____
3-8 Cost factors with respect to time, new materials and classroom accommodations	_____	_____	_____
3-9 Teacher reactions to new practices	_____	_____	_____
3-10 Community acceptance of new systems of grouping or promotion	_____	_____	_____
3-11 Effects upon students with respect to maturation, achievement, fast learners, etc.	_____	_____	_____
3-12 Success at higher levels of education by students exposed to new innovative methods of grading, grouping, etc.	_____	_____	_____

Grouping, promotion, grade-reporting practices (continued)	(1) Highly Important	(2) Moderately Important	(3) Minimally Important
3-13 Others (specify briefly and rate according to "importance"--write "NONE" if you cannot recall any.)			
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____
____________________	_____	_____	_____

Which of the following innovations have you seen adopted in your school district? With whom and from what source did the idea originate?

Please accomplish this question in the following two steps.

1. From the left-hand column below select the primary originator of the innovation within your district and place his (their) number in Column A opposite the appropriate innovation.

2. From the right-hand column below identify the primary source external to your district from which you believe the innovation was obtained and place its number in Column B. If there was no external source, use No. 19 for "None"; if you are unaware of the external source, write in No. 20 for "Don't know."

Since both lists are not all inclusive, write-in sources which more closely approximate the origin of the innovation in either column.

You may write-in other innovations if they are independent of those listed; accomplish Columns A and B for these, also.

Only one number is to be entered in each column.

Primary Originator within District

1. School board
2. School district superintendent
3. Asst. Superintendent/Director/Coordinator/for Instruction
4. Asst. Superintendent/Director/Coordinator/for Curriculum
5. Educational specialists or consultants at district level
6. School principal or vice principal
7. Research office at school level
8. Teachers
9. Students
10. Community residents or PTA

Primary Source External to District

11. County office of education
12. State Department of Education
13. Title III or PACE Center
14. Title IV Regional Centers
15. University education R&D Centers
16. University courses or University professors
17. Programs in other school districts
18. Symposia, professional meetings, workshops
19. None--idea arose purely within district
20. Don't know--source external to district is unknown

	Innovations	Column A (select one from items numbered 1 through 10 above)	Column B (select one from items numbered 11 through 20 above)
3-14	17 "New" sciences	__________	__________
3-18	21 "New" math	__________	__________
3-22	25 "New" social studies	__________	__________
3-26	29 TV instruction	__________	__________

	Innovations	Column A (select one from items numbered 1 through 10 above)	Column B (select one from items numbered 11 through 20 above)
3-30	33 Programmed learning ("scrambled books," teaching machines, etc.)	________	________
3-34	37 Language lab	________	________
3-38	41 Computer-aided instruction	________	________
3-42	45 Simulation or gaming	________	________
3-46	49 Flexible scheduling	________	________
3-50	53 Team teaching	________	________
3-54	57 Non-graded instruction	________	________
3-58	61 Teacher aides (paraprofessionals)	________	________
3-62	65 Cultural enrichment	________	________
3-66	69 Work-study program	________	________
3-70	73 Student exchange program	________	________
3-74	77 Individualized instruction	________	________
	Other		
	____________________________	________	________
	____________________________	________	________
	____________________________	________	________
	____________________________	________	________
	____________________________	________	________

Survey of the Decision Process and Information Needs In Education

Form B

Stanford Research Institute is conducting a study for the Far West Laboratory for Educational Research and Development which is concerned with the process of decision-making and informational needs in education. The emphasis is upon determining the frequency of certain educational decisions, sources of information utilized, problems inherent in obtaining appropriate information in time to make decisions, and the decisions which different types of educational personnel are called upon to make. Significant results from this study are to be placed in the hands of those who are concerned with improving the effectiveness of educational information systems and the educational decision process.

Please give careful consideration to your answers and fill out the questionnaire completely. Individual responses to the questionnaire will be held in strictest confidence and will never be identified by name.

When you have finished, please place the questionnaire in the envelope which has been provided and insure that it is sealed. Your cooperation in taking the time to fill out the questionnaire is appreciated.

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Far West Laboratory for
Research and Development

Maury H. Chorness
Stanford Research Institute

David H. Carlisle
Far West Laboratory for
Research and Development

Carl H. Rittenhouse
Stanford Research Institute

What forms of information, types of reports, communicative acts, etc., have you typically employed in the process of arriving at educational decisions, in planning, or in innovation and change? Indicate the frequency with which you have used any of the following by placing a check (✓) in the appropriate column. Mark each item only once.

	(1) With High Frequency	(2) With Moderate Frequency	(3) With Little Frequency	(4) Have Never Used This Source
1-19 M.A. theses or doctoral dissertations	______	______	______	______
1-20 Professional educational textbooks	______	______	______	______
1-21 Proceedings of professional meetings or symposia	______	______	______	______
1-22 Curriculum materials from school programs developed elsewhere	______	______	______	______
1-23 Publisher's materials (guides, lesson plans, student handbooks, etc.)	______	______	______	______
1-24 Personal communication with educators in other school systems	______	______	______	______
1-25 Formal written reports from other school systems	______	______	______	______
1-26 Discussions (formal or informal) with colleagues in same school system	______	______	______	______
1-27 ERIC documentation (hard copy or microfiche)	______	______	______	______
1-28 Articles in educational research journals	______	______	______	______
1-29 Articles in general educational journals	______	______	______	______
1-30 Educational newsletters	______	______	______	______
1-31 Educational yearbooks	______	______	______	______

	(1) With High Frequency	(2) With Moderate Frequency	(3) With Little Frequency	(4) Have Never Used This Source
1-32 Lecture notes, seminar reports from university courses	______	______	______	______
1-33 Research studies or other analytical studies conducted within the school system	______	______	______	______
1-34 Reports from Title III and Title IV Centers	______	______	______	______
1-35 Others (specify briefly and indicate frequency of use-- write "NONE" if you cannot recall any)				
____________________________	______	______	______	______
____________________________	______	______	______	______
____________________________	______	______	______	______
____________________________	______	______	______	______
____________________________	______	______	______	______

Listed below are 24 areas of educational planning. Please indicate, by placing a check in the appropriate column to the right of each area, the extent of your own personal involvement. Your choices should reflect what your experience has been with respect to your current assignment in your school system.

	(1) Have had no involvement	(2) Have provided advice when asked	(3) Have served with formal groups or committees which have submitted recommendations	(4) Have been given formal authority to make decisions or develop policy
1-36 Salary scheduling	______	______	______	______
1-37 Teaching assignments	______	______	______	______
1-38 Room assignments	______	______	______	______
1-39 Selection of new teachers	______	______	______	______
1-40 Determining daily schedules for the building in which they teach	______	______	______	______
1-41 Determining the schedule in the teacher's own room	______	______	______	______
1-42 Scheduling of supervisory duties (Playground, lunch, after school)	______	______	______	______
1-43 Assignment of children to the various classes, sections or teachers	______	______	______	______
1-44 Determining method of instruction within classroom	______	______	______	______
1-45 Planning school plant expansion	______	______	______	______
1-46 Planning proposed new buildings and additions	______	______	______	______

	(1) Have had no involvement	(2) Have provided advice when asked	(3) Have served with formal groups or committees which have submitted recommendations	(4) Have been given formal authority to make decisions or develop policy
1-47 Determining means of financing school plant expansion	_____	_____	_____	_____
1-48 Organization and content of the curriculum	_____	_____	_____	_____
1-49 Curriculum planning and development	_____	_____	_____	_____
1-50 Selection of instructional supplies	_____	_____	_____	_____
1-51 Developing school budgets	_____	_____	_____	_____
1-52 Evaluating the educational program	_____	_____	_____	_____
1-53 Grouping, promotion, grade-reporting practices	_____	_____	_____	_____
1-54 Building rules and regulations	_____	_____	_____	_____
1-55 In-service education and teacher orientation	_____	_____	_____	_____
1-56 Appraising teacher or administrator effectiveness	_____	_____	_____	_____
1-57 Establishing educational objectives	_____	_____	_____	_____
1-58 Determining educational needs in the general area served by my school system	_____	_____	_____	_____
1-59 Determining the adequacies/inadequacies of graduates going to higher institutions, including higher grade levels in my school system	_____	_____	_____	_____

Can you recall any instances where educational planning for change of any kind, curriculum or instructional change, general school functioning, etc., suffered from the lack of background information or supportive findings, or failed to get implemented altogether due to lack of appropriate information?

1-60 Yes $\boxed{1}$ ___

No $\boxed{2}$ ___

If you checked "yes," describe briefly the following:

Type of project ______________________________

Kind (s) of information not available or inadequate

____

____

____

____

____

____

____

____

Type of project ______________________________

Kind (s) of information not available or inadequate

____

____

____

____

____

____

____

____

Which of the following factors do you believe provide "stumbling blocks" to effective educational decision-making? Read each one and rate it according to how much of a "stumbling block" you believe it is. Check (√) each item only once; but try to use all four rating categories.

	(1) A Great "Stumbling Block"	(2) A Moderately Strong "Stumbling Block"	(3) A Small "Stumbling Block"	(4) Does Not Provide a "Stumbling Block"
1-61 Lack of sufficient time to study the problem				
1-62 Inability to determine where the same problem is being resolved elsewhere				
1-63 Difficulty in defining exactly what the problem is				
1-64 Change in nature of problem while decisions are being made				
1-65 Study of the wrong variables upon which decisions are based				
1-66 Trying to relate results and programs elsewhere to the local problem				
1-67 Too much focus upon the financial aspects of decision-making				
1-68 Failure to explore alternative solutions				
1-69 Lack of qualified skills for providing research support for decision-making				
1-70 Need to satisfy many diverse groups				
1-71 Failure to define goals or objectives in measureable or "operational" terms				

	(1) A Great "Stumbling Block"	(2) A Moderately Strong "Stumbling Block"	(3) A Small "Stumbling Block"	(4) Does Not Provide a "Stumbling Block"
1-72 Failure to get pertinent information to the decision-maker on time	____	____	____	____
1-73 Lack of organizational structures to translate research results into meaningful terms for the decision-maker	____	____	____	____
1-74 Lack of training in decision-making skills	____	____	____	____
1-75 Inability to integrate committee action with ultimate decision-making	____	____	____	____
1-76 Inability to clarify educational issues or projects in the eyes of the community	____	____	____	____
1-77 Overwhelming pressure from non-educational sources	____	____	____	____
1-78 Inability to identify causal factors underlying educational problems	____	____	____	____

1-79 Others (specify briefly and rate according to how great a "stumbling block" they are--write "NONE" if you cannot recall additional ones.)

____________	____	____	____	____
____________	____	____	____	____
____________	____	____	____	____
____________	____	____	____	____
____________	____	____	____	____
____________	____	____	____	____

Listed below are several areas of educational planning. With each planning area are shown several pieces of information which could have a strong bearing upon decisions.

Read each information item and determine the degree of "difficulty" which would be involved in obtaining the information if you have been, or were to be, confronted with the need to make decisions in the educational planning area under which it is grouped. Indicate your choice as to "difficulty" in the appropriate column. Check (✓) each information item only once.

Within each planning area list other items which could be relevant to decision-making and rate them according to the "difficulty" you could expect to encounter in obtaining them. Write "None" if you cannot recall any.

Try to use all three levels of "difficulty" as much as possible throughout this section of the questionnaire; but, answer each item only once.

Educational Planning Areas	(1) Very Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Not Difficult to Obtain
Curriculum planning and development			
2-6 Content and success of new curriculum being developed elsewhere	______	______	______
2-7 Effectiveness of current curriculum	______	______	______
2-8 Experimentation or validation of new curriculums prior to adoption	______	______	______
2-9 Teaching skills required for new proposed areas	______	______	______
2-10 Equipments, resource materials, tapes, slides, etc., which may be required	______	______	______
2-11 New role relationships between teachers and pupils	______	______	______
2-12 Demands upon students (acquisition of new knowledge, skills, attitudes)	______	______	______
2-13 Relevance of learning theory and processes of mental development	______	______	______

Curriculum planning and development (continued)	(1) Very Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Not Difficult to Obtain
2-14 Establishment of educational objectives to guide curriculum planning	____	____	____
2-15 Articulation of new curriculum with retained curriculum	____	____	____
2-16 Others (specify briefly and rate for "difficulty")			
____________	____	____	____
____________	____	____	____
____________	____	____	____
____________	____	____	____
____________	____	____	____
Adopting new methods of instruction or new instructional equipments			
2-17 Evaluative information from other sources in effectiveness, student achievement, etc.	____	____	____
2-18 Change in teacher role with respect to students	____	____	____
2-19 Cost of new procedures or equipments	____	____	____
2-20 Time and effort involved in teacher retraining	____	____	____
2-21 Required teaching and administrative skills	____	____	____
2-22 Community support	____	____	____
2-23 Expectations for consultant support	____	____	____
2-24 Whether adoption is to be limited or widespread	____	____	____
2-25 Impact upon other on-going methods of instruction	____	____	____

Adopting new methods of instruction or new instructional equipments	(1) Very Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Not Difficult to Obtain
2-26 Permanence of adoption in other school systems	____	____	____
2-27 Others (specify briefly and rate according to "difficulty")			
____________	____	____	____
____________	____	____	____
____________	____	____	____
____________	____	____	____
____________	____	____	____
Evaluating the educational programs			
2-28 What components of the program should be evaluated	____	____	____
2-29 What methods should be used for evaluating each component selected	____	____	____
2-30 What skills will be necessary for evaluational studies	____	____	____
2-31 The availability of requisite skills for evaluation	____	____	____
2-32 How frequently respective educational components should be evaluated	____	____	____
2-33 Community resistance to evaluation (test results, etc.)	____	____	____
2-34 Area of student response to be evaluated (achievement, attitude change, social interaction, etc.)	____	____	____
2-35 Identifying objectives and goals of the program in measurable terms	____	____	____

Evaluating the educational programs (continued)	(1) Very Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Not Difficult to Obtain
2-36 Others (specify briefly and rate according to "difficulty")			
____________	____	____	____
____________	____	____	____
____________	____	____	____
____________	____	____	____
____________	____	____	____
Planning proposed new buildings and additions			
2-37 Cost factors, current and projected	____	____	____
2-38 Available locations	____	____	____
2-39 Projected size of student population	____	____	____
2-40 Facility arrangements (movable walls, ratio of office to classroom space)	____	____	____
2-41 Accommodations for new innovative instructional procedures	____	____	____
2-42 An understanding of new directions in which education is moving	____	____	____
2-43 Opportunities for research studies	____	____	____
2-44 Aesthetic preferences of the community	____	____	____
2-45 Faculty-student acceptance of new architectural styles	____	____	____
2-46 Community acceptance of educational procedures implied in new proposed structures	____	____	____

Planning proposed new buildings and additions (continued)	(1) Very Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Not Difficult to Obtain
2-47 Others (specify briefly and evaluate according to "difficulty")			
____________	____	____	____
____________	____	____	____
____________	____	____	____
____________	____	____	____
____________	____	____	____
Appraising teacher or administrator effectiveness			
2-48 Criteria for an effective system	____	____	____
2-49 Effective evaluation systems in operation elsewhere	____	____	____
2-50 Reactions of teachers associations, unions, etc.	____	____	____
2-51 What comprises a fair "work sample" in education	____	____	____
2-52 How educational workloads affect performance	____	____	____
2-53 Role of incentives in performance appraisal programs	____	____	____
2-54 Effects of transfers in assignment upon performance	____	____	____
2-55 Problems in operational implementation of appraisal programs	____	____	____
2-56 Faculty and staff reactions to appraisal programs	____	____	____
2-57 Comparability of job assignments for purposes of appraising differences in effectiveness	____	____	____

Appraising teacher or administrator effectiveness (continued)	(1) Very Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Not Difficult to Obtain
2-58 Others (specify briefly and rate according to "difficulty")			
____________	______	______	______
____________	______	______	______
____________	______	______	______
____________	______	______	______
____________	______	______	______
Grouping, promotion, grade-reporting practices			
2-59 Evaluation of effectiveness of innovations in other systems	______	______	______
2-60 How other programs and findings relate to the local situation	______	______	______
2-61 New skills and demands to be placed upon teaching staff	______	______	______
2-62 Cost factors with respect to time, new materials and classroom accommodations	______	______	______
2-63 Teacher reactions to new practices	______	______	______
2-64 Community acceptance of new systems of grouping or promotion	______	______	______
2-65 Effects upon students with respect to maturation, achievement, fast learners, etc.	______	______	______
2-66 Success at high levels of education by students exposed to new innovative methods of grading, grouping, etc.	______	______	______

Grouping, promotion, grade-reporting practices (continued)	(1) Very Difficult to Obtain	(2) Moderately Difficult to Obtain	(3) Not Difficult to Obtain
2-67 Others (specify briefly and rate according to "difficulty")			
____________________	______	______	______
____________________	______	______	______
____________________	______	______	______
____________________	______	______	______
____________________	______	______	______

Which of the following innovations have you seen adopted in your school district? With whom and from what source did the idea originate?

Please accomplish this question in the following two steps.

1. From the left-hand column below select the primary originator of the innovation within your district and place his (their) number in Column A opposite the appropriate innovation.
2. From the right-hand column below identify the primary source external to your district from which you believe the innovation was obtained and place its number in Column B. If there was no external source, use No. 19 for "None"; if you are unaware of the external source, write in No. 20 for "Don't know."

Since both lists are not all inclusive, write-in sources which more closely approximate the origin of the innovation in either column.

You may write-in other innovations if they are independent of those listed; accomplish Columns A and B for these, also.

Only one number is to be entered in each column.

Primary Originator within District

1. School board
2. School district superintendent
3. Asst. Superintendent/Director/Coordinator/for Instruction
4. Asst. Superintendent/Director/Coordinator/for Curriculum
5. Educational specialists or consultants at district level
6. School principal or vice principal
7. Research office at school level
8. Teachers
9. Students
10. Community residents or PTA

Primary Source External to District

11. County office of education
12. State Department of Education
13. Title III or PACE Center
14. Title IV Regional Centers
15. University education R&D Centers
16. University courses or University professors
17. Programs in other school districts
18. Symposia, professional meetings, workshops
19. None--idea arose purely within district
20. Don't know--source external to district is unknown

Innovations	Column A (select one from items numbered 1 through 10 above)	Column B (select one from items numbered 11 through 20 above)
2-68 71 "New" sciences		
2-72 75 "New" math		
2-76 79 "New" social studies		
3-6 9 TV instruction		

		Innovations	Column A (select one from items numbered 1 through 10 above)	Column B (select one from items numbered 11 through 20 above)
3-10	13	Programmed learning ("Scrambled books," teaching machines, etc.)	________	________
3-14	17	Language lab	________	________
3-18	21	Computer-aided instruction	________	________
3-22	25	Simulation or gaming	________	________
3-26	29	Flexible scheduling	________	________
3-30	33	Team teaching	________	________
3-34	37	Non-graded instruction	________	________
3-38	41	Teacher aides (paraprofessionals)	________	________
3-42	45	Cultural enrichment	________	________
3-46	49	Work-study program	________	________
3-50	53	Student exchange program	________	________
3-54	57	Individualized instruction	________	________
		Other		
		____________________	________	________
		____________________	________	________
		____________________	________	________
		____________________	________	________